THE WONDER OF WORDS

ISAAC GOLDBERG

Cost: $3.75 less 20%
Adv. second-hand in 1957: $6.50

University of Florida Libraries

The Gift of

Ernest G. Atkin

Digitized by the Internet Archive
in 2011 with funding from
LYRASIS Members and Sloan Foundation

http://www.archive.org/details/wonderofwordsint00gold

THE WONDER OF WORDS

BY ISAAC GOLDBERG

SIR WILLIAM G. GILBERT—A STUDY IN MODERN SATIRE AND THE GILBERT-SULLIVAN OPERAS

STUDIES IN SPANISH-AMERICAN LITERATURE

BRAZILIAN LITERATURE

THE DRAMA OF TRANSITION

THE MAN MENCKEN

HAVELOCK ELLIS

THE THEATRE OF GEORGE JEAN NATHAN

PANORAMA—A BOOK OF CRITICAL SEXUAL AND AESTHETIC VIEWS

THE SEXUAL LIFE OF MAN, WOMAN AND CHILD

THE STORY OF GILBERT AND SULLIVAN

THE FINE ART OF LIVING

TIN PAN ALLEY—A CHRONICLE OF THE AMERICAN MUSIC RACKET

GEORGE GERSHWIN—A STUDY IN AMERICAN MUSIC

THE GERMAN JEW—HIS SHARE IN MODERN CULTURE (with Dr. A. Myerson)

QUEEN OF HEARTS—LIFE AND LOVES OF LOLA MONTEZ

DICTATORSHIP OVER THE INTELLECT

BACKSLIDERS TO GOD

THE WONDER OF WORDS

IN POLISH WOODLANDS (translation)

MAJOR NOAH

WHAT YOU LAUGH AT AND WHY

MUSIC FOR EVERYMAN

THE WONDER OF WORDS

An Introduction to Language
for Everyman

by

ISAAC GOLDBERG, Ph.D.

D. APPLETON-CENTURY COMPANY
INCORPORATED
NEW YORK 1938 LONDON

COPYRIGHT, 1938, BY
D. APPLETON-CENTURY COMPANY, INC.

All rights reserved. This book, or parts thereof, must not be reproduced in any form without permission of the publisher.

PRINTED IN THE UNITED STATES OF AMERICA

INTRODUCTION

THE IDEA OF THIS BOOK FIRST OCCURRED TO ME ALMOST twenty-five years ago. I was at that time a postgraduate student at Harvard University, pursuing research, especially in Hispanic culture, under the stimulating direction and friendship of Jeremiah Denis Mathias Ford. Professor Ford had the peculiar faculty of inspiring his students without words. He has been, in his too modest way, responsible for much North American pioneering in Spanish-American and Portuguese-American literature. Under the late Professor Edward Sheldon, the noted etymologist, I had been occupied with Old French. Under Professor Charles Hall Grandgent—that bland humorist who could make Dante, Provençal, Phonetics, or Vulgar Latin equally exciting, and who further endeared himself to me by his fondness for, and intimate knowledge of, Gilbert and Sullivan—I had discovered that such seemingly forbidding rubrics as grammar, etymology, morphology, and the other divisions of linguistics could be extremely fascinating. The study—say, rather, the adventure—of language gradually emerged as one of the major miracles of human existence.

One other man there was who contributed substantially to this reawakened addiction to language: the eminent philosopher George Santayana. I took his course not for the subject but for the man. Santayana had a remarkable feeling for language as the spoken word. The very silences of his lectures were thrilling, for they meant, as we early discovered, a search for the precise term or phrase that fell into place with the satisfying cadence of the right chord in a musical progression.

I say "reawakened" addiction because, from my very earliest years, I had been attracted to the wonder and mystery of language. Grammar, which in my youth was as badly taught

as mathematics, repelled me as it repelled most normal children; not for many years would it evolve from the status of a complicated, irrational bore into a vital pattern. I had grown up in a household where, from the first, at least three tongues were daily sounds, and where song of both the new world and the old was equally familiar.

A curious, nervous child is immediately sensitive to such confusing experiences. One's mother-tongue is not necessarily synonymous with the tongue of one's mother. My mother-tongue is English—the English of my native city, Boston. My mother's tongue was Yiddish, which is essentially a dialect of Middle High German (not, as is stated in the Fourteenth Edition of the *Encyclopædia Britannica,* of Low German). The language of my father's prayers was Hebrew, an ancient speech of the Semitic group that gave to Yiddish its alphabet and its manner of writing from right to left. I mention this antiquated commonplace because, during the war of 1914–1918, an excited propagandist announced it as a discovery; it seemed to suggest, somehow, that Yiddish, a German dialect, was masquerading in a camouflaged alphabet. The same Hebrew alphabet, by the way, is used for the less-known Spanish-Jewish tongue called Ladino.

Hebrew, as the language of my father's prayers, was early imbued, in my ears, with solemnity, majesty, masculinity. Its very letters, heavy and square, disdaining the femininity of vowels, glowered at a child with austerity. Yiddish, on the other hand, was as soft and sympathetic as the women's lips that had imparted to it the unsuspected, humble beauty of its accents. Hebrew, again, was one of the aristocrats of speech; Yiddish was not only saturated with womanliness—we shall see, presently, that woman has been in many ways a profound, an essential, influence upon all language—but with a proletarian coloration. The child, of course, did not perceive this with the clear hearing and sight of the man; he sensed it, however, as keenly as he sensed the difference between, say, a trumpet and a flute, without yet being aware of the acoustical reasons for that difference.

There were other circumstances to pique childish curiosity: the presence of Russian or Polish words and phrases in the speech of his parents; the difference between their English and his own; the stray French and Italian curses that he picked up amid this *internationale* of poverty in a West-End slum, and the Chinese numbers laboriously learned from the local laundryman. Without benefit of instruction such a child absorbs a feeling for verbal distinctions, for idiom, for what is called the genius of a particular language, that comes later or not at all to a child who hears but one language in his earliest years. "Who knows but his own language," wrote Goethe, "knows none." There is wisdom in the exaggeration.

It was the curiosity born of this pluri-lingual heritage that led me, long before college days, to conceive a special interest in language. At the English High School, Boston, I was especially fortunate in having, throughout, Mr. William B. Snow (now retired Assistant Superintendent of Boston schools) as teacher of French. He was a natural teacher of tongues. From him, and not in the misnamed grammar schools, I first learned what grammar was. He gave final form to my linguistic interests. He was a master, not a mere taskmaster. He suggested, beyond parsing, prosody and paradigm, that language was an activity wriggling with life.

Something of this adventure, this eternally adaptive vitality of the human breath shaping itself into meaning, I have tried to transmit to this book upon the wonder of words. It it written for the intelligent layman. It takes nothing for granted in the reader except an active curiosity that is willing to coöperate with the author. All foreign alphabets are transliterated into the Roman type that will one day, I am sure, be widespread through the Occidental world and perhaps the Oriental. All technical terms are fully explained, as to both meaning and etymologies to illustrate one phase of linguistic process. The student—and it is hoped that this book will not be without its interest for specialists as well as for enlightened amateurs—quickly learns, of course, that the original meaning of a word and its present use are by no

means always identical; present use is ratified custom, while etymology is condensed history.

Among the very first books that I really owned—bought with pennies hard-earned on the streets as a newsboy—are four that, midway through high school, I devoured at once with passionate indigestion. I still have them, marked and back-broken from much rereading. They are Max Müller's *Lectures on the Science of Language,* in two volumes, and William Whitney's *Life and Growth of Language* and *Language and the Study of Language.* They were, and in a degree they remain, for all the corrections that later investigation has made, among the most exciting volumes, in any genre, that I have read in any language. There are books whose covers are as portals that open upon new worlds. The scientific rigors of Jespersen, Sapir, and their confrères are hardly for beginners; but they represent a goal towards which all beginners should aspire.

My own book aspires to be a very modest stairway leading to portals like these. Such as it is, no pains have been spared to make it exact, scientific, and (out of respect to the intelligent layman for whom it is intended) not too simple. The various chapters have been read by specialists in the particular fields; to them I am indebted for correction and counsel.

ISAAC GOLDBERG

POSTSCRIPT

This Introduction was found among Dr. Goldberg's papers after he died at his home in Brookline, Massachusetts, shortly before six o'clock in the afternoon on July 14, 1938. At the end of the Introduction there was a note in brackets: "Here will follow specific names, acknowledgments, and so on." Men and women who have facilitated Dr. Goldberg's task in writing his last book will find comfort in knowing that he had appreciated their labors, even though their names will not appear in their reserved space.

THE PUBLISHERS

CONTENTS

		PAGE
INTRODUCTION		v
FOREWORD, BY J. D. M. FORD		xi
CHAPTER		
I.	MAN, ANIMAL, AND SPEECH	1
II.	THE INFANCY OF LANGUAGE	20
III.	SOUND BECOMES SENSE	38
IV.	THE "GESTURE" AND THE "LOVE" THEORIES	53
V.	IMAGERY AND METAPHOR	71
VI.	THE WORD AS MAGIC	98
VII.	"A LOCAL HABITATION AND A NAME"	121
VIII.	CHILD AND WOMAN IN LANGUAGE	147
IX.	HOW SOUNDS ARE MADE	167
X.	HOW SOUNDS CHANGE—AND PERHAPS WHY	189
XI.	"PHILOLOGERS . . ."	216
XII.	JANUS WORDS	237
XIII.	HOW MEANINGS CHANGE	250
XIV.	WORD-HISTORY, OR ETYMOLOGY	275
XV.	WHAT ARE WE TALKING ABOUT? OR APPLIED SEMANTICS	296
XVI.	WHAT IS GRAMMAR?	319
XVII.	SOME PROBLEMS OF STYLE	352
XVIII.	PURISM	369
XIX.	LANGUAGES, RACES, AND CULTURES	386
XX.	FROM SPEECH TO WRITING	422
XXI.	FORWARD FROM BABEL	451
XXII.	TO-MORROW	464
INSTEAD OF A BIBLIOGRAPHY		468
SUBJECT INDEX		471
WORD INDEX		477

FOREWORD

THE BOOK WHICH IS NOW PRESENTED TO THE PUBLIC WAS on its way through the press when death took Dr. Goldberg from us. It had been my privilege to discuss with him part of the subject matter in the course of the past year, and he had asked me to read the proof sheets when they were ready. His demise occurred as he was about to send them to me. It has been my melancholy duty to comply with his expressed wish, and I have examined his material with great care. The result is that I have felt constrained to modify certain statements, but I have done this feeling sure that he would have altered them if the suddenness of his passing had not prevented us from having that final conference upon which we had both counted. On the whole the alterations are of a minor sort; nothing has been changed in a way to impair the force of any of his basic arguments.

Long ago Dr. Goldberg proved his prowess as a literary critic and, in particular, gained world-wide fame by the excellence of his critical analysis of Ibero-American literature, both that in Spanish and that in Portuguese. The present work is the first—and, unhappily, the last—in which he applied his keenly analytical powers to a consideration of historical and applied linguistics. It should be obvious to every conscientious reader that he has amassed in it an immense amount of philological fact and that he has marshalled this information in a manner intended to make appeal to readers at large and not merely to the erudite; both the scholar and the layman should find much of abiding interest in this survey of a very wide range of linguistic phenomena.

In that portion of the book which deals with phonetics Dr. Goldberg was confronted by no few difficulties in his endeavor to make this subject clear to those not familiar with

the technique of it. He could not adopt the symbols used by the expert in phonetics, and he had to resort to illuminatingly approximate rather than rigidly accurate renditions of some of the sounds whose development he set forth. Nevertheless he has achieved a more than satisfactory measure of success in his exposition, and the professional linguist need not feel impelled to call him to account.

It is the earnest hope of this former teacher and ever admiring friend of Dr. Goldberg that a ready welcome will be accorded to this masterly treatment of that marvel of Nature and of Man which is here termed *The Wonder of Words.*

J. D. M. Ford

Harvard University

THE WONDER OF WORDS

He was . . . aware, as few have been, that to ask about the meaning of words is to ask about everything.

I. A. RICHARDS, in *Coleridge on Imagination.*

They did not understand a single word of what he was saying, but that made no matter, for they put their heads on one side, and looked wise, which is quite as good as understanding a thing, and very much easier.

OSCAR WILDE, in *The Birthday of the Infanta.*

THE WONDER OF WORDS

CHAPTER I

MAN, ANIMAL, AND SPEECH

Language is one of the most useful of things, yet the greater part of it still remains (what it must all have been in the beginning) useless and without ulterior significance. GEORGE SANTAYANA, in *Reason and Art.*

Some melancholy [i. e., deep-thinking] men have believed that elephants and birds and other creatures have a language whereby they discourse with one another. BISHOP REYNOLDS, in *The Passions and Faculties of the Soul of Man.*

§ 1. LANGUAGE AS COÖPERATION AND COMMUNION

WORDS, IN A WORLD OF WONDERS, ARE AMONG THE MOST wonderful adaptations of man. They are a complex music of meaning played upon himself as the orchestra. He is at once the performer and the instruments performed upon. Words are made of the very breath of his being. As fragile as the atmosphere that we must breathe, they yet may prove as enduring as granite.

A column of air rises from the lungs, passes through the larynx and the aperture between the vocal cords, is changed in shape by impact against the palate, the teeth and gums, the cheeks, the nasal passage, and especially by the wagging of the tongue; and out of this "airy nothing" are born a "local habitation and a name"—the miracle of meaning.

How does it happen that the air we breathe out acquires for us and for others a significance? For language, primarily, is a social process; it arises from the need to communicate and to coöperate, to become one in understanding and in effort. At

the root of the word *commune,* which is related to our word *common,* is the idea of *oneness,* of *unity. Communication* is the establishment of oneness. A *community,* or *commonalty,* is a group that is united—unified, made one in purpose.

When Lord Mowbray receives from the lips of the monarch, in Shakespeare's *Richard II* (Act I, scene iii), the sentence of exile, what he feels most is not the banishment but the *ex*-communication. He does not pronounce that dread word, but everything he says implies the horror, even the annihilation, attendant upon being severed from those who speak a common speech.

A heavy sentence, my most sovereign liege,
And all unlook'd for from your Highness' mouth.
A dearer merit, not so deep a maim
As to be cast forth in the common air,
Have I deserved at your Highness' hands.
The language I have learn'd these forty years,
My native English, now I must forego;
And now my tongue's use is to me no more
Than an unstringed viol or harp,
Or like a cunning instrument cas'd up,
Or, being open, put into his hands
That knows no touch to tune the harmony.
Within my mouth you have engaol'd my tongue,
Doubly portcullis'd with my teeth and lips;
And dull unfeeling barren ignorance
Is made my gaoler to attend on me.
I am too old to fawn upon a nurse,
Too far in years to be a pupil now.
What is thy sentence then but speechless death,
Which robs my tongue from breathing native breath?

The last line may appear to contain a mixed metaphor; tongues do not breathe. Tongue here, however, means speech, which to Mowbray, as to any man exiled from those with whom he has a language in common, suddenly appears as the breath of life no less than the breath of communication. Into two words—"speechless death"—Shakespeare concentrates the terrible core of excommunication. By such perceptions, indeed, is his deathless speech attended.

The oneness that man seeks in his relations to God or nature, and in his relations to his fellow-man; the unity that he desires for his own body and soul as well as for the body and soul of society, is implicit in his language.

With the historical order of words such as *wholeness, holiness,* and *health* we are not at the moment concerned. It is their psychological association that is now foremost. For *wholeness* and *holiness* and *health* grow from the same linguistic roots and bear witness to man's fundamental need for physical and spiritual organization.

To be whole is to be hale, healthy. The opposite of *heart-whole* is *heartbroken;* when we "go to pieces" we "break down" and are asked to "pull ourselves together." The establishment of the association between division and mental or physical illness must have come early, for the prefix *dis-,* in its negative or unfavorable connotation, is supposed to derive from the word for 'two.' When we are in doubt we are mentally divided; *doubt* and *division* contain vestiges of that same word for 'two.' A doubt, in German, is likewise a *Zweifel;* here the element *zwei* (two) is clear and is related to our word *twist.*

"It would seem characteristic of the Indo-European mind," writes Arsène Darmesteter in *La vie des mots (The Life of Words),* "or at least of the Aryan family in Europe, to start from the idea of *two,* and by a natural and unconscious process, to arrive at the idea of *badness.*"

Thus the Indo-European root *dva* (Latin *duo,* 'two') gives both the Greek *duo,* 'two,' and the particle *dys,* which connotes "the idea of difficulty, pain, unpleasantness." From the root *dy* in *dys* come also the Greek *dis* and the Old Latin *dvis;* Latin *dvis* becomes both *dis* and *bis. Dis* has a bad sense; it is concealed in *difficult (dis-facilis,* 'not easy'); it is evident in such formations as *dis-plicere,* 'displease.' *Bis* in Latin means 'twice' (*biscuit,* 'twice-cooked'); in the languages descended from Latin, however, under the form *bis* or *bes,* it reassumes the evil significance. Darmesteter offers as examples the Old French *bes-torné,* 'badly turned'; also the Old French *bes-vue*

(modern French *bévue*), 'an erroneous view,' or 'mistake.'

In current slang a "two-timer" is a double-dealer.

"The idea of diversity tends to that of perversity," as may seem to be summed up in the history of such a word as *duplicity* (i. e., 'two-foldedness').

To be crazy is to be, in the French that gives us the word, *écrasé*—that is, 'shattered' or 'broken.' The conception of a sick mind as a broken one (for example, "nervous breakdown") appears likewise in the psychiatric term *schizophrenia,* which is a Greek formation from *schizein,* 'to split,' and *phren,* 'mind.' The phrase "split personality" has become common as a translation of *schizophrenia.* Colloquially, an eccentric is known as a "crackpot," which is not too distant from *schizophrenoid.*

Integrity is Latin for 'entireness.' An *integer* is a whole number. Moral integrity (moral entireness, moral unity) is moral health, moral wholeness, even wholesomeness. *Health,* then, is physical wholeness, just as *holiness* is spiritual wholeness. The German word for Saviour is *Heiland,* 'He who brings healing'—He who restores to wholeness, to health, the ailing spirit.

Firmness, too, is a unity. The oldest notion suggested by *firmness* is that of 'holding fast' (Sanskrit *dhr*). It suggests also terms for law, support. *Infirmity,* lack of firmness, as naturally suggests terms for illness. In English, to be infirm is to be weak. An *infirmary,* however, is a hospital. *Enfermo* is Spanish for 'sick,' and *enfermedad,* 'sickness.' From the notion of holding fast, *firmness* develops the meaning of moral steadfastness. By that same token certain words for *loose* would develop the opposite connotation: a *loose* woman, *lax* discipline. To *dissipate,* originally, was to 'scatter,' to 'throw apart': hence, as in *dissipation,* the 'scattering of energies,' with a moral connotation. What becomes too fast may become *rigid,* and hence at the opposite pole of *loose*—"rigid moralist."

Man seeks, then, to be at *one* with man and God, not at *odds,* or at *sixes and sevens.* To be at one is to be reconciled,

as in *Richard II* (Act I, scene i), when the monarch, seeking vainly to compose the differences between Bolingbroke and Mowbray, declares:

> *Since we can not atone you, we shall see*
> *Justice design the victor's chivalry.*

Here *atone* is used transitively in the sense of 'reconcile.'

There is, of course, finally, the word *atonement,* one of the most remarkable in the language, embodying (or should we say enspiriting?) a most decisive transformation from the physical into the spiritual. To atone, in this sense, is to be *at one* with God, to sink self into the not-self, to achieve a mystic unity with the source of being, wiping out all error and finding peace in self-submergence.

For it is not only the "hairy ape" of Mr. O'Neill's expressionistic drama who desires passionately "to belong," which is his uncouth manner of saying *to be at one.* It is a need felt by man-ape as well as ape-man, by the loftiest intellectual as well as by the lowliest gangster. It is a need that finds, in such basic words as *at*one*ment* and *communion,* a double translation.

All beginnings are exceedingly difficult to establish. The first things to happen are the last to be discovered. The origins of language (for it would be presumptuous to speak of a simple origin) go back darkly deep into the prehistory of the human race; the best we can do to throw light upon them is to offer scientific speculation, which is but another term for intelligent guesswork. Civilized man, to whom writing is as common as speaking, easily forgets that by far the longer life of mankind was lived in epochs with only gestures, uncertain speech, and, much later, crude markings, to transmit the details of human experience.

These gestures, uncertain vocal cries, and especially the crude markings, represent, moreover, a relatively advanced stage of man. Already they serve to set him apart from the brutes. In seeking to understand what man was like before

he developed the instrument of language we must remember that language, which in a sense he invented, has also transformed him. We cannot place ourselves in the position of primal, speechless man. We cannot easily understand, if we really can understand at all, the workings of his undeveloped brain. Many an error has been made by expert investigators of language because they attributed to primitives the same logical approach to experience that modern man has attained.

The common ancestor of man and ape lived some two million years ago. It is but half a million years since man learned to stand upon his hind legs and transformed his forepaws into hands. The change in posture brought with it changes in the relative positions of his internal organs, of which the brain is one. Change of position, caused by changes of adaptation, made possible in turn further adaptive adjustments, until the ex-animal (as James Harvey Robinson has called him) was on the long road to becoming man.

The acquisition of language, the evolution of animal grunts and whines and gestures and grimaces into communicative sounds, was part of the long journey. As for writing, earliest documents are a mere ten thousand years old, which, in relation to the prehistory of man, is as the crust of the earth to the solid sphere itself. In the history of the universe, our globe is but a new-comer; in the history of our globe, man and language are as infants; in the history of man and language, writing is of this morning.

It is, for example, a plausible theory that leads the student of tongues to study savage tribes and the infant of civilized man. Yet here we must be especially cautious. The most savage of tribes to-day is far advanced beyond what primal, babbling man must have been. Such tribes have developed rituals and social customs; they can talk a language that, however wild it may sound to our ears, is a highly complicated advance over what we imagine the earliest speech to have been. Nor are we to adopt toward the languages of the savage an attitude of condescension. They are involved, confus-

ing structures, but they are surprisingly capable of answering to the needs of the culture amidst which they developed.

The infant of civilized man, moreover, is the heir to the acquisitions of his social group. From the moment of birth he is trained in a highly elaborate linguistic culture. He has waiting for him the vast encyclopædia of experience that has been accumulated by the human race. He cannot, therefore, represent our primal ancestor who was born into a world for which that encyclopædia was yet to be written, experience by experience, gesture by gesture, word by word.

Much has been done for linguistic science by the study of the infant, of the savage in his native surroundings, and of animal life. For, if we are to appreciate the beginnings of language, and of human life in general, we must question, first of all, prehuman life—life prehuman in the order of time and prehuman still in the order of intelligence.

Even so, we cannot be certain that we have reached back to the sources of language. In some dim eon of the geological past it had its beginnings. Those beginnings are the object of our intelligent guesswork, and much has been accomplished through the establishment of scientific procedure. More has been accomplished in mastering the *process* of language development as distinguished from the *origins*.

Man has always felt a certain kinship with the animal. This appears in his fables, which lend to animals the faculty of speech. It may well be that before man, in his own mind, had emerged from the community of animals, he had even attempted to carry on with his brute associates the sort of communication that they carry on with themselves. Children find nothing illogical in conversing with their dolls and their pets: though this, of course, is largely imitation of grown-ups, it has also a bearing upon the matter.

We share with animals the fundamental skeletonic structure which dictates a certain resemblance between their gestures and ours. One of the sources of our humor, indeed, is that resemblance; it flatters our superiority and at the same time creates amusement by its incongruity. This helps to ex-

plain, too, why we laugh at the antics and the facial expressions of the monkey. The biological kinship, however, goes farther. For the purposes of understanding the origins and development of communication and language it is to be traced back to the presence of a nervous system.

The connection between *motion* and *emotion* lies deeper than etymology. It reaches to the biochemical secrets of living matter. We say that we are moved, whether we refer to physical transportation or to the feelings. Words for the various types of motion easily become terms descriptive of emotion; an experience *transports* us; we are *carried away.*

Emotion itself means, originally, 'a moving away from'; it is thus a fair description of the type of action called *reflex*—an unpremeditated, unreasoned, involuntary bending back or withdrawal or shutting, as of the eyelids before the threat of injury or the presence of a foreign substance. This is not limited to animate matter, as witness the sensitive plant of Shelley's verses.

It is such reflex actions that are associated with the origins of expressive movement, grimaces, gestures, and sounds —in animal and man. In the beginning the movements and sounds are literally *expressive,* not communicative. To *express* is to 'press outward'; this is precisely what takes place, for example, when an animal or a human being sniffs an unpleasant odor and is led to expel his breath, to reject the ill-smelling air. We make quite the same sound when we wish to express contempt of a person or situation; and the sound says to us, plainly, "take it away; it smells bad." There is an "etymology" of facial expressions and gestures as well as of words. When we wave an idea aside with an outward thrust of the forearm we are reverting to the far older gesture of thrusting away an unwelcome physical object. We are rejecting it; to *reject,* originally, is to 'throw back.'

It is difficult to establish whether gesture preceded sound as a means of communication; certainly both must have been for long concurrent, as they are, in different degree, to this day. It is not important to find an answer to this question.

"The whole man thinks," wrote Lewes in his life of Goethe; in the same way we may say that the whole man feels—that thinking and feeling are each an integrated expression of the entire human being. The whole man, likewise, expresses; his facial muscles grow tense or relax; his gestures, at the same time, trace in the air a graph of his intention or his dim meaning; his voice need not precede or follow these other manifestations, for it is, especially at first, an undifferentiated part of them.

The voice of the primitive was, in the imagined beginnings, as much a reflex event as the facial expression or the gesture. There are efforts and passions of man and animal that, through the constriction of muscles, force air from the lungs through the vocal cords. Rage, anger, pain, and lust are recognizable not only by characteristic gestures and expressions, but by characteristic sounds. (Our verb *to speak* is derived from a root meaning 'to thunder,' and seems to suggest that our ancestors attributed voice to Nature and regarded themselves as one with it). The sounds, in this reflex condition, are an accident of intense emotion or of intense effort. They are devoid of intellectual content. They have, at first, no true *meaning,* no *communicative value,* no *social substance.* They are not, in other words, signs or symbols. They are the primal matter of potential language, nothing more.

Language might have developed from any of the senses. How did it come to develop chiefly from man's use of his voice? Again we are set wandering in the mists of theory, but this time we are on somewhat safer ground. The sense of smell, which is so important to animals, was never important to man as a means of social communication. Odors, to be sure, have a revealing power; they tell us that putrid matter is present, or that flowers are nearby, or that something good to eat is in the making. They do not lend themselves, however, to genuine interchange of impressions. I recall, as a student at Harvard, hearing Professor Santayana speculate upon an art of perfumes. Perhaps, in a limited way, such an

art would be possible; some persons are as sensitive about blending fragrances as they are about the proper succession of wines and liqueurs at a dinner. Yet neither the sense of smell nor that of taste is sufficiently flexible to provide a means of genuine, practical communication.

We use the word *taste,* however, to mean, by metaphorical extension, an appreciation of the finer, more subtle things in life. Thus the grossest appetite, associated with the tangible, primary necessity of food, becomes the symbol of the most refined appetite, associated with the intangible luxury of æsthetics.

Gesture and facial expression have their linguistic potentialities and their limitations. They are dependent, first of all, upon visibility. It is quite useless to make faces in the dark or to wave one's arms except as a release for personal feeling. No one can see us; there is, therefore, no true communication. Facial expression, moreover, demands closeness to one another. Gesture possesses a slight advantage over the voice when it is a matter of communicating at a distance; we can see farther than we can hear. But this is not the advantage that it appears to be. Such communication may serve certain very utilitarian purposes; it hardly allows for the development of subtlety in expression. Besides, most communication, before the invention of writing, takes place face to face; if gesture had been enough, if facial expression had been enough, our ancestors would not have had recourse to the voice.[1]

The hand, moreover, became too important in the practical business of living to be used for communication. It was too busy doing things to discuss them. One can talk while doing things with the hands; one cannot gesture under the same conditions. Between the hand and the tongue—between

[1] Farrar, in his *Chapters on Language,* quotes Isaac Vossius as inveighing against "the plague and confusion of so many tongues." Vossius would have had us "adopt an universal and self-evident system of signs and pantomimic expressions."

The curious reader may, in this connection, be moved to consult a tightly packed German monograph, *Sprache ohne Worte* (*Language without Words*), by Rudolf Kleinpaul.

manufacture (doing things with the hands) and *language* (saying things with the tongue) man has built the entire structure of civilization.

The tool is an extension of the hand. The word becomes an extension of the mind, of the act.

§ 2. HAND AND TONGUE

It is natural, then, that the hand should figure largely in the human vocabulary, and that, like most words signifying concrete realities, it should lend itself to the most abstract combinations. The hand touches, it points, it makes, it counts. If it were not for touch, it is questionable that our sight would be able to appreciate fully the third dimension. We achieve "a feeling for form" by first *feeling form* in actuality.

To *manage* (Latin *manus,* 'hand') is to handle or to govern. To *maneuver* is originally to work with the hands. (Compare our words *handiwork* and *handwork.)* To be *handy* is to be dexterous. To *manipulate* meant, at first, to lead by the hands. When one receives a *mandate,* it means that something has been put into one's hands. *Handsome* itself at first meant dexterous.

To *command* and to *commend* are both linked, in origin, to *mandate* and therefore to Latin *manus,* 'hand.' To *commend* is originally to place in one's hands.

Verbs for grasping objects easily become verbs for grasping ideas. To *comprehend* is, indeed, first to seize. The monkey has a *prehensile* tail; man has a *prehensile* mind. "Do you understand?" is formal language; it has, as the verb still shows, a literal origin. Informally it is translated, "Do you *catch on?*"

To *capture* is to seize, physically; from the Latin *capere,* 'to seize,' 'to catch,' are derived likewise the final element in all our combinations such as *receive, perceive, conceive, accept,* and the middle element in such terms as *inception, reception, deception. Capire,* in Italian, is 'to understand'; it

is derived from the selfsame Latin verb, *capere*. The German *begreifen,* 'to seize,' is also used for 'to understand.' We "pick up" information. We "hand it" on, or down. To *apprehend* is not only to catch but to learn (French, *apprendre;* Spanish, *aprender*).

Bechtel has shown that "words for sense perception in the Indo-European have only secondarily acquired this meaning, while primarily they designate the activity by which we perceive or the object which we perceive."

Thus, to *feel* is connected with hand (Greek, *palamē*).

Thus *dicere* itself (Latin, 'to say') originally meant 'to point.' We still say that a man *indicates,* or *points out,* what he means.

The testimony of language is clear: the beginning of understanding is in man's physical, sensual experience with the objects that surround him.

"Language," writes Wells in a memorable phrase, "is the *hand of the mind* to hold and keep."

The importance of the tongue is shown, of course, in the very term, *language,* which is derived from *lingua,* Latin for 'tongue.' Language means, therefore, tonguing, or wagging of the tongue.

Tongue, besides meaning the organ, stands for that system of significant sounds in the production of which the organ plays so conspicuous—because so visible and movable—a part. We might, so far as essential organs of speech are concerned, have said something like *lippage* or *labiage,* for the lips certainly play a most visible and movable rôle in talking. We might have said *dentage,* with the teeth uppermost in our attention; or *throatage,* or *palatage,* or *gummage.* Any of these possible words for what we call language, once it had been ratified by popular usage, would have served just as well as the words we now have. Our remote ancestors, however, in the irrecoverable past long before the invention and evolution of writing, had seized upon the tongue as the chief representative of all the organs that produce speech. The single member, by a familiar rhetorical device, was made to stand for the whole group.

The animal has hands—that is, forepaws; the animal has a voice, produced by a mechanism very similar to our own. Why, then, has true language remained the achievement of man alone?

It is a question about which students are less dogmatic to-day than they were some eighty years ago, when the theories of Darwin burst like a bombshell amidst the contemporary complacency.

The study of language, like all the other 'ologies, received a tremendous stimulus in the late fifties of the nineteenth century. The concept of evolution in biology was consolidated, at last, with the publication of Darwin's *Origin of Species* (1859). At once the battle was on. Darwin, himself fundamentally a believer, could see nothing in his theories that was inconsistent with belief in a Creator. Many theologians, none the less, felt that the foundations of their creeds were being undermined; instinctively they began a counter-attack.

The Darwinian thesis, though long latent in the advanced thought of earlier ages, created a new epoch in science. It imparted a fresh impulse to the historical and comparative study of human speech. Max Müller, the noted German Orientalist, lecturing at Oxford in the years immediately following upon the publication of Darwin's germinal study, responded characteristically to its influence. Müller, a generous, learned, pioneering soul with a passion for fairness and toleration, was yet a professor of the old school. His lectures are much occupied with defenses, protestations, and pronouncements that would seem strangely out of place in philological discussions to-day. The newly discovered parentage with animal creation so recently proclaimed by Darwin appears to have troubled Müller not a little. Seeking for some sharply delimited boundary between animal and man he found it, as each of us manages to find it, in his own specialty.

"Where, then," he asks, in the last lecture of his first series, "is the difference between brute and man? What is it that

man can do, and of which we find no sign, no rudiments, in the whole brute world? I answer without hesitation: the one great barrier between the brute and man is *Language.* Man speaks, and no brute has ever uttered a word. Language is our Rubicon, and no brute will dare to cross it. This is our matter-of-fact answer to those who speak of development [i. e., evolution], who think they discover the rudiments at least of all human faculties in apes, and who would fain keep open the possibility that man is only a more favoured beast, the triumphant conqueror in the primeval struggle for life."

The strong emotional tone of the professor is attributable to his nearness, in time and space, to Charles Darwin. In the preface to the sixth edition of the *Lectures,* Müller repeats, in italics, his definition of Language as *"our Rubicon which no brute will dare to cross."*

The problem remains, though we couch it now in different terms. So scientific an investigator as Vendryès concludes that "Despite all our efforts, between the primitive 'bark' and our oldest tongues there exists a gulf which can never be bridged."

§ 3. DO ANIMALS SPEAK?

The renowned psychologist Wundt has said that an inquiry into the origins of language is based upon a fallacy, namely, that there was a time when the human race was without language. This he refused to believe, regarding the idea of a prelinguistic stage as altogether "fictitious." The problem of the origins of language was to him a problem that had no foundation in reality.

Perhaps, in this respect, it is possible to be too "scientific." That language has evolved is beyond question. We can follow its evolution in written and printed documents that are part of recent history. That printing is younger than writing, and that writing is ever so much younger than speech, are statements requiring no proof. Printing and writing are preservative and conservative; they assist, though they by no

means insure, standardization. Linguistic change, before language was recorded, must have been far more capricious than it has been since the age of records set in.

Whether languages may be traced back to a single aboriginal speech, as Alfredo Trombetti taught, or whether they are derived from a plurality of sources, is here beside the point. There is an essential process of derivation. The farther back we can reach in the history of this process, the closer we get to origins, though even then we may be very distant, indeed, from them. The importance of an inquiry into linguistic origins lies not so much in tracing verbal history back to silence, or to inarticulate grunts, as in discovering, over this route retraced, some of the milestones on the road.

What the attitude of Wundt really signifies is essentially the same as Max Müller's pronouncement about the everlasting linguistic distinction between man and beast. Now, if there never was a time when man did not speak, there never was a time when man was animal. If there ever *was* a time when man was animal, then there must have been a time when he did not speak what we understand as speech.

Modern investigators are not content, however, to leave this fascinating problem unsolved. Moreover, as important as the basic problem are the by-products of the research.

There are men who have studied the apes in the laboratory and in the field and who maintain that the elements of true language are to be discovered among them. R. L. Garner, in his book *Apes and Monkeys,* has described the language of monkeys as a grammarless system of monosyllables. He claims to have learned some of their words, and to have used them with success in communicating with monkeys from other parts of the world. He describes, as accurately as our writing can do so, the mechanism and the meaning of these sounds.

"There are sounds," he reports; "which are easily identified but difficult to describe, such as that used to signify 'cold' or 'discomfort'; another for 'drink,' or 'thirst,' another re-

ferring to 'illness,' and still another which I have reason to believe means 'dead' or 'death.' There are perhaps a dozen more words that can readily be distinguished." [2]

Whether the animals as we know them will ever achieve speech as we know it is a challenging question. Garner, who is not too much trusted by investigators, attempted to make the olden fables come true. Man, after all, is an animal who achieved speech. He could not, however, have achieved it if he had not been endowed with a brain that made the achievement possible. The real question, then, is this: has the animal a brain comparable to that of the human being, adaptable to the requirements and the refinement of communicative speech?

In linguistic study, as in biological, there appears to be a "missing link." Just as we do not know a direct animal ancestor of man, so we cannot establish with unquestionable continuity a mental ancestor, one who definitely bridged the chasm between mere vocalism—howls, hunger calls, love calls—and a flexible system of communication capable of development. Animal vocalism appears to-day to be just where it was in the ages before history. In this connection, however, it is useful to keep in mind the notion, by no means new, that the bark of the domestic dog is not native to the species. There are, according to Farrar,[3] whole races of dogs ("and perhaps," he adds, "it may be said of all wild dogs") who do not know how to bark—"for instance the Esquimaux dogs, and those which run wild in the Pampas, in Chili, and in the Antilles, which only howl. Indeed Prichard, who notices this fact, mentions the conjecture that the dog's bark *'originated in an attempt to imitate the human voice!'* "

Even our human gestures have changed very little with the centuries; as instinctive motions they remain largely the same. *Alogon,* the modern Greeks called the animal: 'without rationality or speech.' German philosophy also invented a *Homo alalus* (Latin, 'speechless man') as a link between

[2] R. L. Garner, *Apes and Monkeys* (Ginn and Co., 1900).
[3] *Chapters on Language.*

animal and mankind. It may be as much a hypothetical abstraction as the "economic man" of later addicts to the science called dismal. The link is still missing.

Yet the fundamental resemblances of animal to man remain fascinating; the animal seems to possess the elements of intelligence and language in appreciable degree. The wonder is, not that he can easily be proved *not* to be man, but that he should so closely be like him in bony structure, in nervous system, in physiology, in chemistry, in blood stream, in reflexes.

He whom we call savage recognizes in his own language the kinship between animal and man. Our word *savage* is derived, through the French, from the Latin *selvaticus,* or 'man of the woods.' This, precisely, is what the name *orang-utan* signifies in the language of the Malays: *orang,* 'man'; *utan,* 'wood' or 'forest.'

The primeval jungle, the forest and the woods, as contrasted with those clearings that more civilized man made for his dwellings, form a mental and linguistic contrast as well. The sense of superiority felt toward the man-of-the-woods by him who has made his way out of them, or toward the country-dweller by the city-dweller, or toward the man-of-the-soil by the man-of-the-hard-pavements, is written into the history of our words.

Civilization is, etymologically (that is, word-historically), *city-fication.* It is opposed to *savagery,* or the habits of the forest-man, and to *barbarism,* or the uncouthness of those who do not speak our tongue. (We are dealing now with word-histories, not definitions.) He who dwells in the city (Latin, *urbs)* is *urbane* in manners; he who dwells in the country (Latin, *rus*) is *rustic.* The peasantry, the tillers of the soil, are treated in like cavalier fashion. A *heathen* is, originally, a dweller in the heath; so, too, a *pagan* (Latin, *paganus*) is a *countryman,* a *peasant* (French, *paysan,* from *pays,* 'country'). A *farmer* (German, *Bauer*) becomes a *boor.* So, too, the Hebrew *am ha-eretz* ('man of the soil') comes to mean a *boor,* an *ignoramus.* A *villain* (from Latin *villa*),

meaning at first a rustic, becomes a sinister evil-doer of melodrama. One is *courteous,* on the other hand, because one dwells not near a villa as a serf but as a servitor in a court, and has acquired courtly manners.

The German word *Hexe,* meaning a 'witch,' goes back to the same word that gave us *hedge.* A *witch,* then, was a woman of the country, that is, of the bushes. A *hag,* too (related to *Hexe*), is a woods-woman. A *Bushman* is originally a nomadic hunter of South Africa. Our word *hedge* itself takes on a derogatory significance, as in such expressions as *hedge priest, hedgeborn,* with connotations of poor, mean, illiterate, common, clandestine.

The expressions "from the sticks," "the tall grass," and "the tall timbers," carry a derogatory connotation. "Back to the woods!" is a slang phrase that many will remember.

The foreigner, only because he is not one of us, is regarded as *outlandish;* he comes from an outside land. Distinction between forest and city easily shades off into distinction between one's own land and all others. To the Greeks, those who spoke any other tongue were *barbarians;* their language sounded like a mere babble or *bar-bar* (Sanskrit *varvara*)—a derogatory imitation of incomprehensible foreign sounds. In Anglo-Saxon the word *wealh,* which at first meant 'a foreigner,' was soon applied to the Britons (whence the term *Welshman*) and came to mean 'slave,' which is what Britons never never shall be. The word *slave* itself has a like origin in racial or nationalistic feeling; it is derived from the name of the Slavic or Sclavonian peoples.

"They have made us foreigners in the land where we were born," says a character in John Dos Passos' novel *The Big Money.* A foreigner, at first, was simply an outsider: Latin, *foras,* 'out-of-doors,' 'abroad.' *Foras* is cognate with, or akin to, our own word *door.*

Stranger and *alien,* two other words that have naturally acquired a connotation of hostility, begin likewise as terms meaning simply 'outsider' or 'other's.' *Stranger,* which comes to us from the French, is a personalized form of Latin *ex-*

traneus; this, in turn, is from Latin *extra,* 'on the outside,' and is at once recognized as the English *extraneous.* A stranger, then, is an outsider, just as a foreigner is. *Alien,* from Latin *alienus,* is cognate with our word *else.*

CHAPTER II

THE INFANCY OF LANGUAGE

> Words, in fact, are like the fossils of the rocks; they embody the thought and the knowledge of the society that first coined and used them, and if we can find out their primitive meaning by the aid of the comparative method, we shall know the character of the society that produced them, and the degree of civilization it had attained. The palæontologist can reconstruct the animal life of the past ages of the globe with no greater ease than the comparative philologist can reconstruct the life of bygone and forgotten communities. If the fragment of a fossil bone can tell us the history of an extinct world, so, too, can the fragment of a word reveal to us the struggles of ancient societies, and ideas and beliefs that have long since perished.
>
> A. H. SAYCE, *Introduction to the Science of Language.*

§ 1. BEFORE WORDS

IN 1931 A GERMAN ANTHROPOLOGIST AND PHILOLOGIST, Georg Schwidetzky, published a short monograph that was translated the following year into English under the misleading title, *Do You Speak Chimpanzee?* It was an ambitious goal that Schwidetzky set for himself: nothing less than "to discover, through systematic investigation of the speech of animals (in particular apes, monkeys, and prosimians), the first beginnings of speech and the language of prehistoric and fossil men." He proceeded, in self-conscious originality, by "empirical rather than theoretical methods." [1]

Schwidetzky, however, is careful to acknowledge the work of his predecessors—Franke, Garner, Boutan, Learned, Yerkes, Furness, Schmid. To many it will come as a surprise that there have long been in existence dictionaries of animal words, of which the most recent is that of Blanche W.

[1] Georg Schwidetzky, *Do You Speak Chimpanzee?* (E. P. Dutton and Co., 1933).

Learned, compiled at the suggestion of Yale's noted psychologist, Robert M. Yerkes. It is significant that Learned is a musician, and that the registration of the monkey "words" (like that of so many other animal sounds) should have involved musical notation. It may be significant, too, that the pronounced musical values of these chimpanzee "words" tend to disappear in adult life; there is a fundamental difference between the speech of the child chimpanzee and the adult.

According to the orang-utan dictionary of Dr. Furness, this animal stands "on the very threshold of human speech."

It is a preliminary conclusion of Schwidetzky that "The study of monkey language is just as indispensable to an understanding of the deeper layers of human speech as the study of the anatomy, blood and bones of monkeys is to an understanding of human phylogeny." [2] The attitude appears scientific and eminently logical. Whether this undaunted investigator has been as blameless in his philology as in his anthropology remains for specialists to determine. It is good, none the less, that he, and others with him, should so stoutly open the doors that professional philologists such as Max Müller so dogmatically slammed shut.

Professor Bastian Schmid studies the speech of hens and concludes that it has an hereditary basis.[3] Stephen von Maday and Conrad N. von Unruh study the vocabulary of horses. Pfungst reports upon the sound-groups of wolves; Römer, upon those of cats. Landois, a Catholic priest, is not deterred by theological bias from seeking speech-origins in amphibians and reptiles. Professor von Frisch has investigated the speech of bees. Schwidetzky refuses to acknowledge that even fish are dumb.

The beginning of speech he would assign to the beginning of air-breathing—hence, to the animal's need for oxygen. Hissing thus becomes one of the oldest of sounds, as does

[2] *Ibid.*

[3] Bastian Schmid, *Begegnungen mit Tieren.* This is to be had in an excellent translation by Bernard Miall, *Interviewing Animals.*

the simple expiration that may be represented by any indeterminate vowel. (The word *vowel* goes back to Latin *vocal,* which in turn is derived from *vox, voces,* a 'voice' or 'sound'.) Since breathing is a form of feeding, and since in drinking and eating we make sounds even more audible than those of simple in-breathing (inspiration) and out-breathing (expiration), speech (as distinguished from language) ultimately is associated with the elemental necessities of life and may be regarded, evolutionally, as a by-product of air-hunger and food-hunger. We shall see, presently, when we come to the theories dealing with the origins of language, that it has been associated also with another hunger—the reproductive hunger that evolves from crude lust into the most poetic phases of love.

Man must preserve himself—therefore he breathes and drinks and eats.

Man must reproduce himself—therefore he lusts and, in time, he loves.

Speech (the sounds of which spoken language is woven) is born of the noises he makes while he breathes, while he eats and drinks, while he loves, while he toils.

Many of these sounds he shares with the other and older creatures of Nature. Speech, then, in such a sense, is far more ancient than language. These elementary sounds we inherit from our prehuman ancestry. "When, in conversation, we idly express our opinion by merely grunting," writes Schwidetzky, "we should stand aghast at the antiquity of the utterance. It is as though we had found, in some rocky matrix, a fossilized animal that lived millions of years ago." [4]

There is reason for believing that the earliest mammals had shrill voices; the later, larger species developed deeper ones. The breaking of the human voice at puberty thus represents, in the individual, the progress from primitive voice to the voice of the more highly evolved animal.

In the human being, the more highly evolved speech is centered in the newer brain, or cerebrum; primitive speech-

[4] Schwidetzky, *op. cit.*

process is centered in a much older portion of the brain, the medulla oblongata. Reflex cries are thus controlled by the medulla oblongata. It is significant that this primitive portion of the brain controls breathing, as well as the characteristic sounds made by children before the paths between cerebrum and medulla have been formed.

Schwidetzky states categorically, in opposition to the general opinion of philologists, that not only is there such a thing as animal language, but that these languages undergo development. "Comparative morphology shows that changes have taken place in the organs of speech and these bear witness to the changes that must have taken place in their products, sounds. . . . From the point of view of sound, human speech is a combination and development of many kinds of animal speech, and no linguistic changes other than those that have long been recognized by philologists are needed to account for the transmutation of animal into human words." [5]

Schmid is quite as specific. "Quail," he writes, "are second to domestic fowl in respect of language . . . Only our domestic dogs have made some progress. Our dogs, for example, are more vocal than wolves." However, "animals are not machines, as was once believed, but neither are they rational beings." [6]

§ 2. BRUTE PHONETICS

Schwidetzky summarizes the speech-sounds that serve as links between monkeys, prehistoric man, and man as history knows him. They are (1) the tongue-click; (2) the lip-crack, or *p* produced by the rapid opening of the lips; (3) the lip-click of the orang-utan—a voiced sound between a *p* and a *f;* (4) the lateral click, or indrawn *hl,* found among mandrills and among the Zulus; (5) the *ngak* or *nkak* of young chimpanzees, preserved in old Chinese; (6) the purr; (7) the *ururur* of the lemur.

When, however, he attempts to trace back to these ele-

[5] *Ibid.* [6] Schmid, *op. cit.*

mental sounds certain specific words in human speech, he is less convincing.

Thus, in a flight of daring, he offers an origin for the Latin word *aurora* ('dawn') that harks back indeed to the dawn of animal, not human, speech.

At the base of *aurora* Schwidetzky discovers the lemur sound *ur-ur,* a sort of purr produced by an "ill-closing glottis of the button-hole type." Now, the lemurs, according to this same intrepid investigator, appear to be morning worshipers. The lemurs, after the cold nights of the tropics, "sit with raised hands, their bodies in the same position as that of the famous Greek praying boy, warming themselves in the sun," which, after the night's chill, "must have a particular significance in the animals' day. It is therefore not unwarrantable to assume that Aurora, the Roman goddess of dawn, has her ultimate origin in the morning exercise of a lemur. Perhaps not even her ultimate origin, for purring delight in the warmth of the sun belongs . . . to an even earlier phase of life than that of the lemurs." [7]

This is a strange philological method which the investigator carries into a series of supposedly related words, all coming from the purr of the lemur. Latin *urere,* 'to burn,' "arises from the same complex." So does *ruere,* 'to hurry' or 'fall,' 'dash' or 'burrow.' So may arise Hebrew *or,* 'light,' and *ruach,* 'wind,' 'breath,' 'air' or 'spirit.'

To many, the entire theory of Schwidetzky's will appear as fantastic as does his central derivation of *aurora* from the purr of the lemur. Speech-elements are already ancient in prehistory; even language, as a meaningful development of these elements, goes back to the dawn of humanity. Language, unlike those who spoke it, does not leave fossils, unless we are to interpret fossils in a metaphorical sense. Fantastic speculation rushes into the zones of our ignorance like air into a vacuum.

Yet the speculations of Schwidetzky are hardly more fantastic than the word-histories advanced less than a century

[7] Schwidetzky, *op. cit.*

ago by reputable philologists. Unless man is to be regarded as a special creation, endowed at birth with a fully developed language, there must have been a time when he was a mere babbler; there must equally have been a time when he was in a transition state between animal and human being; there must, then, have been a time when the speech-elements of the animal were evolving into the speech-elements of man. I am inclined to believe, then, that such investigators as Schwidetzky, however strange and even outrageous their specific suggestions may appear, have blazed a path that must bravely be followed by contemporary linguistic research.

To-day, with the advantages of the invisible microphone, the chatter of animals may be recorded under conditions far more favorable than those formerly employed. Acoustical recording was less accurate, more clumsy, than electrical. Electrical reproduction, moreover, is more faithful than the outmoded acoustical, stem-winding method. University foundations study the gibbon in his native habitat; they play back recorded animal speech and attempt to discover whether the sounds convey meaning to other animals of the same species.

That man can imitate the sounds of animals, even luring them thus to their destruction, is nothing new. That man has established, between himself and his domesticated pets and slaves, a mode of simple communication is likewise nothing new. That animals and insects have means of elementary communication, enabling them to coöperate, is a commonplace of observation.

§ 3. THE EVIDENCE OF GEOLOGY AND ANTHROPOLOGY

The true problem, then, would seem to be, not whether animals, as the evolutionary predecessors of man, have a crude speech or even a crude language, but, rather, whether they are capable of developing these crudities; or, better still, why have they not been able to develop them in the manner that distinguishes man from the rest of brute creation?

The answer, at least in part, is to be found in the superior

organization of the human brain. So far as speech and language are specifically concerned, that organization is to be found in the area of what is known as the third frontal convolution, located on the left and generally larger side of the brain.

It is from the interior of fossil skulls, as reproduced by casts, that anthropologists deduce the shape of these convolutions; from the shape they further deduce the potentialities of fossil man for speech and language.

Here, again, the specific uncertainties of scientific investigation are balanced by the general certainties.

Precisely how old the universe may be, and man within that universe, is not sure. This earth may be eighty million or eight hundred million years old. The first fossils that suggest human beings may be more than half a million years old. Scientists, none the less, with their knowledge of the brain and its evolution, have been able to assign, to fossil remains, a relative age and, what is more important, a relative order of appearance upon this earth. It would appear, for example, that earliest man was by no means so well-endowed for speech as is later man, so that the dogmatic assertions of Wundt may have been premature.

What is the evidence of geology and anthropology as to the capacity of primitive man, or perhaps we should say preman, for speech?

The oldest known fossil resembling man is the so-called *Pithecanthropus erectus,* or the ape-man who walked erect. The remains were discovered in the early 1890's, by Dr. Eugene Dubois; according to Hooton, in his entertaining work *Up from the Ape,* this ape-man was well deserving of the title "missing link." From the evidence of his skull he was possessed of all the potentialities of speech. His frontal lobes, which are among the newest acquisitions of human brain specialization, were larger than those of the gorilla, though smaller than our own. The left frontal lobe was larger than the right, thus indicating that man's predecessors, more than half a million years ago, were right-handed. The

erect posture indicated, moreover, that the foot, having become "humanized," had already released the forepaw, or hand, for individualized functions. Just how fit *Pithecanthropus* was for speech is hard to say; his inferior convolution, however (that is, the speech area of the brain), is distinguishable, and argues for a certain development of vocalism.

Next in order of evolution, though not of discovery, are the so-called Heidelberg man and *Eoanthropus,* or dawn-man. There is some uncertainty as to the age in which they lived. According to Hooton, Heidelberg man, discovered in 1907 by Dr. Otto Schötensack, is a more evolved specimen than *Eoanthropus,* who, by the way, was not a man, but a lady. *Eoanthropus,* known also as Piltdown man, from the name of the Common in Sussex, England, where she was unearthed by Charles Dawson, during 1908–12, may be anywhere from two hundred thousand to one million years old. Heidelberg man, according to Wells, is some two hundred and fifty thousand years old.

However this may be, Piltdown man shows an essentially human development of the third frontal convolution of the brain, so that, according to Hooton, in *Up from the Ape,* "speech was certainly at least a potential ability." According to Wells, the jaw of Heidelberg man was narrow behind, not giving enough tongue-play for speech; he may thus have been incapable of speech altogether. May not this be doubtful, however? That Heidelberg man had "nothing we should call a language" [8] is easily imaginable. The tongue, on the other hand, although it has in many languages provided one of the words for language, and although we wag it now freely enough, is not essential to speech. Vowels and consonants may be formed without it, and a primitive or primordial speech-system could have been developed even if there were no tongue at all.

Later fossils, such as that of Neanderthal man, so named from the cave in Düsseldorf, Germany, where he was discovered in 1848–56, naturally reveal a higher development

[8] H. G. Wells, *Outline of History,* chapter on "The Making of Man."

than that of *Pithecanthropus* or *Eoanthropus*. Here, too, speech mechanism is revealed; and intelligence "was certainly far superior to that of any anthropoid ape and may have been but little lower than that of some primitive men of today." Hooton admits him into "full human rank."

The evidence of geology and anthropology, then, is that man, in all likelihood, ever since his ancestors stood erect, has been a talking, but an imperfectly talking, animal. With finer development of the specialized brain areas has come not only a greater skill in general muscular coördination, but also in that type of motor coördination called speech.

More important than the matter of how and when, precisely, speech originated is the matter of how it evolved. The true origins of language are probably lost to us forever. Man and animal share certain speech-elements, as they share gestures and expressions and reflexes; they share, too, the need of communication and the faculty of it. In animal this faculty is severely limited, while in man it still holds out startling possibilities. Efforts to teach words to animals cannot be said as yet to have proved successful. Between man and animal still, in Müller's dramatic imagery, lies that Rubicon which man has crossed, leaving animal on the further side. Yet it was with the brute, and none other, that man began the perilous crossing.

The relation between thought and language—whether one preceded the other, whether they are varying aspects of the same phenomenon, in what manner they interchange influences—is a problem that belongs to the end of linguistic study rather than to the beginning. Yet obviously there was what may be called a preverbal intelligence. The animal has managed to survive without a real language; man, before he developed language, likewise survived into the period when language was born. Thinking, one commentator has said, is a process of *sorting; intelligence* comes from a Latin root signifying, among other things, 'to bring together,' 'to choose.'

Confronted over and over again with the necessity of choice, animal and man alike develop a technique of choos-

ing. The daily acts of primitive man—travel over a road, the handling of improvised tools, the breaking up of material or food into smaller pieces, leadership in action—contribute and deepen a sense of relationships. Such a sense, at first, is no more exact than is early language. It is founded upon the concrete experiences of the race. Thus Pierre Janet, in his study of *L'intelligence avant le langage (Prelinguistic Intelligence)*, suggests that the thread, as the symbol of gathering and holding together objects in a series, may well have supplied in time the idea of the conjunction as the thread-word of the parts of speech. For the conjunction joins coördinate materials.

Even abstraction in thought, according to the same authority, may have been prefigured in the beginning by such a process as threshing wheat and separating it from the chaff. All abstract terms, of course, are basically sensuous in origin; they point back, like all metaphors, to concrete realities. The word *abstract* is an excellent case in point. It is derived from the Latin for 'to draw from' or 'to separate.' The first, purely physical, meaning has been extended, by linguistic ramification, into many meanings, until the original meaning has all but disappeared; here the concrete has become abstract, indeed.

The same part of the brain that governs the action of our limbs governs also our speech. This is highly significant. Speech, as we have seen, is a *motor activity; language is a form of action.* Speechless action must have preceded language. Voice begins as a by-product of action, whether in the rough routine of the daily struggle for food or during the moments of rest. Even rough breathing, or sighing, makes characteristic sounds. The beginnings of speech cannot be separated from the actions of which they were a component part.

§ 4. RIGHT- AND LEFT-HANDEDNESS

That left portion of the brain which controls speech and other activity determines also, in a different area, the mo-

tions of the right half of the body. Our right hands generally are stronger than our left because the left side of the brain is generally more fully developed than the right. This has led to a human preference that is clearly mirrored in language.

Any child with a marked tendency toward left-handedness has learned, at the cost of discomfort and subtle outrage to his being, that the world is prejudiced in favor of right-handedness. Specialists in neurology and psychiatry share the belief that the regimentation of the left-handed child is attended by a violation of the nervous system, and is not to be undertaken lightly. We have been educated very slowly, it is true, away from the prejudice. The left-handed boy who used to be regarded, and therefore regarded himself, as an inferior creature, has lost some of his feeling after attending a baseball game and seeing in what high esteem the "southpaw" pitcher is held, as well as the special care with which the ball is pitched to left-handed batters.

The prejudice, however, is now fixed in language and will not, in all likelihood, ever be eradicated. The human bias in favor of the right hand arises from its greater dexterity. *Dexterity,* indeed, means right-handedness; *dexter,* Latin for 'right,' is akin to the Sanskrit *daksh,* meaning 'to be strong.' Our word *left,* not strangely, comes from a Teutonic series meaning, generally, 'weak.'

The left hand, in most people, is the less skilful; few are ambidextrous, which is to say, if we translate literally, possessed of two right hands, just as we say of an awkward person that he is all thumbs. *Gawky* is akin to French *gauche,* which means 'left,' and, consequently, *awkward.* We all know what is meant by a left-handed compliment. Illegitimacy of offspring, whether in the symbols of heraldry or in popular speech, is designated by reference to the left hand. The bend sinister (inexactly called the bar sinister) is the heraldic emblem of bastardy. (Latin: *sinister,* 'left.') We call certain marriages left-handed because the groom gives his left, not his right, hand to the bride, in token of the fact that the marriage is morganatic—to one of inferior station, who does not

acquire for herself or for her children the rights that would normally accrue to the wife and offspring of the husband. Such a wife and such offspring are commonly called left-handed. Ko-Ko, in *The Mikado,* relating the false execution of Nanki-Poo, speaks of baring his "good right arm." We refer to an invaluable assistant as our "right-hand man."

The right side, by a natural association of ideas, became the direction from which good omens came. The left, as naturally, became the side of sinister omens.

From the physical category the conception invades the mental and the moral. A direct road is a straight road. *Direct* comes from the Latin *rectus,* akin to Sanskrit *rju,* 'straight,' 'right,' and to German *recht,* as well as to our own *right* and *correct.* So, in French, *droit* (Latin, *directus*) replaces *diestre,* from Latin *dextera,* and means 'right,' whether relating to the hand or to an idea; capitalize it and it becomes *Droit,* the 'Law'—the embodiment of that which is right in the eyes of society. Usually, that which is right is erected into orthodox belief. *Orthodoxy* comes from Greek *orthos,* 'right' (i. e., correct) and *doxia,* 'teaching.'

Thus the right hand, by various radiations of meaning, gives its name to skill, proper thinking, justice; the left symbolizes clumsiness, improper thought or deed, injustice. The wider the departure of a political party from conventional principles, the more it is held to move to the left. Originally, it moved actually to the left, for the more radical parties were seated to the left of the presiding officer. Such a seating, however, is itself a comment upon the left as a side of threatening omen.

§ 5. GESTURE AND NUMBER

Early action, before man and animal had learned to coordinate their muscles and to exercise the judgment needed in their respective pursuits, was necessarily of a groping, clumsy nature. So must early language have been. Disregarding for the moment the difference separating the brain of man from the brain of the animal, man has an immense

physical advantage over animal in the mere mechanics of speech. Because of his erect position his vocal powers excel in both range and control. The ape, according to Garner, is next in order. Garner has suggested that the true indicator of vocal powers is to be found in what he calls "the gnathic index," or the angle that is formed by the lines drawn from the opening of the mouth to the chin and from the chin along toward the throat. In animals of the canine type the gnathic index (*gnathos* is Greek for 'jaw') is obtuse; in man it approaches the right angle. "As we descend the scale from man through apes, monkeys, lemurs, and lemuroids, ultimately ending in the reptilian forms, we find the vocal powers restricted in scope and degraded in quality, until in the lowest reptiles they are lost in a mere hiss." The variations in the jaw index cause a change in the position of the brain, as well as in that of the vocal cords.

The confusion, the inaccuracy of primitive action and speech are suggested also by the earliest experiences of the race with numbers. The sense of number is possessed by many animals; it is not, however, among animals or primitive man, a logical appreciation of order. We did not begin with 1 and work our way forward. It is much more likely that we began with 2 and 5, and for the very concrete reason that we have two hands and five fingers on each hand. Tobias Dantzig, in his excellent work *Number: the Language of Science,* distinguishes between *number sense,* which is shared by animal and primitive man, and *counting,* which is an exclusively human attribute.[9]

Number sense is a feeling for what we might call the quantitative contour. Under certain circumstances, for example, a bird can tell when some of its eggs have been removed from the nest. It cannot count; it seems to detect a change *in the picture* and to react accordingly. Man, before he has learned to use his fingers for counting, seems to be at

[9] Schmid relates that "a female bird brought the youngsters a mouse from time to time, which she divided into as many parts as there were nestlings." *Interviewing Animals,* p. 58. This appears to be number sense based upon quantitative contour.

a stage but slightly advanced over the bird. Certain savage tongues have words for *one* and *two;* after that they have recourse to a word that means 'beyond' or 'many'—to a word, in fact, that returns the concept of number to the earlier stage of quantitative contour. The word for 'beyond' or 'many' then comes to mean 'three.' Latin *tris* (three) is regarded by some etymologists as a development from *trans,* meaning 'beyond.'

The manner in which, through the use of his fingers, man came to develop a genuine system of counting belongs rather to the history of writing. It is interesting to recall that if we speak, in reckoning, of *digits,* it is because man's first attempts at logical numeration go back to his digits; *digitus* is Latin for 'finger.' Even in the history of numbers, then, which developed into the language of science, man began with concrete, physical, sensuous realities. For numbers, like so many other words and conceptions, begin with the human body. The old Latin numerals I, II, III, IIII (IV is a later development) are almost images of the fingers. The evidence from the counting methods of savage tribes is strong, even exhaustive proof of the origin of numbering in man's fingers and toes. Counting by systems of fives, tens and twenties is derived from the five fingers of the hand, the ten fingers of both hands, and the fingers and toes combined. A few examples out of a possible thousand or more: The Otomacs, according to Tylor (in his classical work on *Primitive Culture,*) [10] when they wish to indicate three, "unite the thumb, forefinger, and middle finger, keeping the others down." Many tribes desiring to express five "in words called it simply by their name for the *hand* which they held up to denote it . . . in like manner they said *two hands* or *half a man* to denote 10 . . . the word *foot* carried on the reckoning up to 15, and to 20, which they described in words as in gesture by the *hands and feet* together, or as *one man.*"

The word for 'five' in Sanskrit (*panca*) is related to the word for 'hand' (i. e., five fingers); in the Api language of the

[10] See chapter on "The Art of Counting."

New Hebrides, five is *luna* (hand) and ten is *luna luna* (two hands). We still measure horses by *hands* and lengths by *feet.*

The Greek word *pempazein* (to "five") supposedly is derived from the habit of counting on one's fingers, and is used to express counting. The Finnish word *lokket,* likewise meaning 'to count,' is derived from the word for ten, *lokke.* Just as the word for *hand* can give us, as in the Sanskrit and in lesser-known tongues, the word for *five,* so the word for *five* can come to mean *hand;* "give us five" was once slang, and not in English only, for "shake hands." Early numbering was not abstracted from the objects to which it referred. In the Thimishian language of a British Columbia tribe, according to Dantzig, were to be found "seven distinct sets of number words: one for flat objects and animals; one for round objects and time; one for counting men; one for long objects and trees; one for canoes; one for measures; one for counting when no definite object is referred to. The last is probably a later development; the others must be relics of the earliest days when the tribesmen had not yet learned to count."

When man has progressed to the stage where he can conceive, in addition to beech-tree, apple-tree, palm-tree, the general word *tree,* he has gone far indeed. As far, in fact, as when he has reached the stage where he can conceive of numbers 1, 6, 8 as independent of the things numerated (one horse, six cows, eight hens).

There is another element that contributed to the emergence of speech and that probably began with it, in the human throat. The beginnings of speech were also the beginnings of song. Out of the one has come language; out of the other, that language of tone called music. The same vocal cords that are used to produce words are employed to produce singing. From all the available evidence, primitive speech, before it evolved into definite word-systems, was more like singing than like speaking. Certainly it had a wider range of tones than is common to language to-day, even in such languages as Chinese, which to Western ears sounds sing-song. Excessive tone has been bred out of language, just as excessive gesture

has been bred out of social intercourse. Each is supposed to be a sign of uncouthness, of primitivity. Yet a language without *intonation,* without pitch and accent, would sound monotonous; it would lose, in fact, many a subtlety of meaning.

There are those who regard song as one of the important origins of language itself. To disregard its influence is surely to miss the fuller understanding of rhythm, of poetry, of quantity in vowels, of accentuation; it is to miss more: the overtones of language by which it not only can say things but suggest so much more than is actually spoken. Speech and song, even to-day, are not so widely separated as they appear to be.

§ 6. SUMMARY

We have found that man's first response to the stimulus of his environment and of his bodily mechanism is in the nature of reflex movement—an involuntary jerk, as it were, caused by the contraction of muscular tissue, an *expression* (reaction) caused by an *impression* (stimulus).

In the face, such reflex action results in various types of grimace, depending upon the nature of the stimulus. Rage bares the teeth, preparing them to bite; horror dilates the pupils; a bitter taste or an unpleasant odor induces what we now call a frown, and suggests the rejection of food and drink; an agreeable taste, on the contrary, relaxes the same muscles involved in rejection, and induces what we now call a smile. Thus pain, fear, triumph, and all the other primitive responses have their characteristic expressive grimace.

In the limbs, and especially in the arms, reflex action results in various types of gesture, which are part of the bodily posture as a whole. What we now call pointing was in its origin perhaps a direct grasping, or attempt to grasp; what we now call the gesture of rejecting was in all likelihood originally an actual thrusting off. Gestures, as limited as they may be, are inherently more variable than grimaces.

Together, grimace and gesture form a remarkable communicative unit. The face is a most expressive dial of the

emotions; including its power to turn upon the neck it is capable of pointing in various directions, and even of expressing, in time, abstract notions of a limited type. Gesture is more expert with pointing; it can serve, moreover, for counting. Gesture and grimace supplement each other; they are not to be conceived, however, as having evolved separately.

For that matter, sound, as a production of the animal and human vocal cords, is not to be considered as having evolved independently of gesture and grimace. It was, as far as we can judge, from the beginning a natural, a reflex accompaniment of the other reflexes. Contraction of the lungs by pain, rage, effort of joy, force the breath through the vocal cords and produce the elementary noises that found a double development into song and speech.

It must be remembered, at this point, that we have not yet reached language. The reflex causes movement; this movement affects the body as a whole, whereupon face, limbs and—if such is the type of stimulus—voice react as *an organic entity*. The movement, in turn causes expression: the actual, physical out-pressing of breath, together with the characteristic look upon the face and the characteristic pose of the various bodily members. Impression, reflex movement, expression . . . there is yet an element lacking for language, and that element is communication.

We cannot be said to deal with fully developed language until the following conditions are present:

The speaker must intend to transmit a specific message.

The hearer must receive that message and understand it to transmit what the speaker intended it to transmit.

In a word, there must be an intentional and successful interchange of meaning.

Reflex movement may be interpreted and therefore understood, but it is not yet language because the animal or human being has not initiated it voluntarily; he has not intended to convey a message. I understand, in a sense, the wagging of a dog's tail, but I do not know certainly that he intends me to

understand it, or precisely what—if this is so—he wishes me to understand. I know, more or less, what is signified by the crowing of a cock, but obviously the cock has not meant to communicate anything to me by his proclamation. I know from the smile of an infant that it is content, but clearly the infant has not had any communicative intention.

Yet it is from such reflex expressive motions and sounds that meaning and interchange of meaning are born.

They lead us back to the problems: What is meaning? How does meaning originate?

These questions represent but a scratching of the surface. The deeper implications of language-study lead one into the most labyrinthine recesses of art and science. They enmesh one in the basic puzzles of civilization. In the same measure that we understand language, we understand ourselves and the commonwealths that we destroy or rebuild. Language, which does so much to betray us, to defeat us, may be turned by scientific and artistic study into the most valuable of allies.

We are now ready to consider, as part of the problems of meaning, the various theories that have been advanced to explain the origins of language.

CHAPTER III

SOUND BECOMES SENSE

> Among the prime sources of error are *words,* which are now being examined with unprecedented suspicion. Man has for many thousands of years believed in spirits; his language is permeated with animistic expressions which cannot but be a potent factor in influencing his thoughts. . . . He has not been much concerned with scientific truth and error, and so his ways of expressing himself are ill-adapted to careful description and discrimination. Indeed, most people most of the time are sadly bored by attempts at accuracy. . . . Our speech is full of anachronisms recalling ancient misapprehensions of all kinds. So one of the tasks that is imposed upon us by the increase of knowledge and the consequent revision of old ways of thinking is further study and investigation not only of these faults of language, but of how they have influenced and continue to influence even scientific thinking. We must devise better and better ways of talking about things as they now appear to us; for thinking and language are inextricably interwoven and interdependent, and both must be constantly considered in any attempt to illustrate the story of error. JAMES HARVEY ROBINSON, on "The Procession of Civilization," in *The Story of Human Error,* a symposium edited by Dr. Joseph Jastrow.

§ 1. UNDERSTANDING AND MEANING

ALL THEORIES ABOUT THE ORIGINS OF LANGUAGE INVOLVE theories as to the nature of primitive man. A theory is but a provisional explanation offered in accordance with the known facts. The discovery of new facts either weakens or strengthens the theory to which they have reference. With respect to linguistic theories, and not to them alone, it should be kept in mind that they are not necessarily in disagreement; they may support as well as contradict one another.

This much, amidst the fog of conjecture, is certain: our primitive ancestors made certain sounds and heard others,

whether from animals or in nature or from themselves. Long before the adaptation of the voice (that is, speech-sounds, as distinguished from sounds with definite meanings, to which the word language is more exactly applicable) there was a certain type of understanding.

Understanding, whether among man or animals, arises from, and is part of, a situation—of a group of relationships. Understanding is saturated with experience. When the hand is pulled back from the fire, the hand (i. e., our nervous organization) "understands" the flame. When the infant cries for food, it has begun to "understand" hunger and the mother has begun to understand the cry of hunger. Articulate speech, or language, refines upon such understanding; it is not necessary to it.

Such understanding, however, is little removed from that involuntary response to stimulus which constitutes reflex action. It is largely instinctual. It remains, unassisted by development, upon the brute level. Much understanding among human beings, even to-day, is hardly above such a level, just as much pseudo-conversation among human beings, even to-day, rises little above the level of semi-animalistic babble.

Robert Briffault, in his book *The Mothers,* has suggested that man developed language because of the prolonged infancy of the human child. This favored the formation of a family group and provided a long period of companionship between mother and child especially, thus permitting time for the interchange of influences and the slow but steady development of tradition. Certainly a brief social contact is far less likely to produce anything like language than is a prolonged association.

It is known, for example, that singing birds learn their songs from their parents. If they are removed from the nest before they have acquired the family song, they will sing nevertheless, but the song will be a new one. It is the same with children born, say, of English parents and removed in infancy to a foreign country; it is the language of the new country that they will speak as their own.

How does it happen, however, that speech is molded into meaning? For both language and music represent a plastic and symbolic transformation of sound. How does it come that primitive, instinctual "understanding" becomes verbalized—developed, that is, into a system of words?

To answer, we must return to the nervous organization of the primordial human being and to the place of sound in his life.

If the whole man thinks and feels, the whole man speaks, too. Man works, plays, loves, eats, and drinks. He does all these things, however, as an organism, not as a catalogue of attributes. The appearance of a nervous system goes back to the beginnings of sentient life; the nervous system is an organizing, a correlating, center. Our passion for unity is a noble aspiration that finds its physical pattern in our nerves. If unarticulated speech began as a by-product of the noises made while breathing and eating, this is no argument against its having begun also as a by-product of the sounds made while hunting, loving and playing. Our senses are correlated.

Yet early man, like his perpetual plagiarist, the child, and perhaps like his animal forebears, lived in a world much less definite than our own. He achieved but slowly a sense of his individuality—his separateness from the rest of nature and from his fellow creatures. He was not, from the evidence available, clear as to the distinction between reality and dream, between the animate and the inanimate. He personified the forces of Nature, attributing to them a life such as his own. Resemblances became identities. Dream visions became ghosts.

In modern terms, he "projected" himself upon his environment. To the abuse of this tendency in poetry Ruskin gave the name "poetic fallacy," but it would be a fallacy indeed to imagine that there could be any poetry, or, indeed, any language, without it. Such projection is one of the roots of metaphor, which is itself one of the indispensable sources of articulate speech. It is by the simple and natural process of likening the new to the old, and explaining to himself the

unknown by the known, that man multiplied his verbal control over his universe.

Understanding between human beings is possible because they are fundamentally alike. The chimpanzee cannot imitate actions that he does not, in some measure at least, comprehend. Imitation itself, among animals and human beings, may be in some cases purely reflex or compulsive; in others, however, it has a partly intentional basis.

There are reflex sounds, such as the so-called cries of warning, that may represent a transitional stage between reflex and intention. The animal that shrieks in terror at having detected an enemy has not, in the beginning, any intention of warning the rest of the herd. Its reaction to the presence of the enemy is as reflex as a sneeze or a cough. Yet the others of the herd seem to understand the cry, and, for practical purposes, do understand it. For they run from the enemy.

The cry of terror from the leader has "struck terror" into his hearers. It has done so by setting up, in the animals that heard the shriek, a reaction resulting in either the selfsame type of shriek or the feelings that would cause, *in the hearer,* such an outcry. The original sound, a reflex of fright, becomes impregnated with meaning because it sounds like the hearer himself making the same shriek, and, indeed, sometimes induces the hearer to join in the howl.

This has a distinct relationship to crowd psychology among human beings, and not to the psychology of crowds alone. To behold someone else weeping is of itself, without participation in the cause, an inducement to feel sad. We laugh with other laughers, whether we have heard the jest or not. Laughter is proverbially infectious. There is a "sympathetic vibration" of human moods as well as of strings on an instrument.

The phrase, as applied to human moods, is more than a metaphor. Many of us have experienced a dryness of the throat after listening to a speaker with a rasping delivery; it is as if we had been mimicking his voice and strained our vocal cords. We tire watching others engage in arduous effort, as if we have

been toiling with them. One part of the body "imitates" the other, as when the tongues of some persons move in rhythm with the scissors or the pen that they are using.

It is possible, then, that there was a species of collective understanding before a clear, individualized meaning evolved. Certain psychologists maintain that there is even a "collective unconscious"—a heritage of racial memories stored up in the nervous system.

Less uncertain is it that the primitive confusion between subject and object persists in the psychology of the child, who, despite the advantages of parental example, refers to itself as "me" long before it achieves a consciousness of "I." Nor, in the history of language, does the first person appear invariably before the third.

If, then, it were not for a fundamental likeness to others, we should not have reached a stage of understanding with them. Mankind is *man* as *kin: man-kin.* To be *kind* is to treat one another as *kin* or *kindred* supposedly should do. The German for child, *das Kind,* originally included the wider significance of one's *kind.* It is by imitation that a child learns to speak; it is by "sympathetic vibration" that the child becomes able to imitate, to reproduce, not only the sounds of language but its emotional basis. The necessary associations are thus more easily established.

§ 2. POOH POOH! BOW WOW! DING DONG! AND A YO-HE-HO!

It was a source of intense argumentation among the ancients whether language originated in Nature or by convention. Did language come from outside of man, or was it a human development? Was it natural or artificial? Did words have a direct connection with the things they stood for, or were they manufactured arbitrarily? The school of the Analogists held to the first explanation; the school of the Anomalists held to the second. To-day, the prolongation of this controversy into

modern times strikes us as old-fashioned and fruitless, which is another way of saying unscientific.

The first sounds uttered by man are natural, in that they issue from his body and are conditioned by the organs that participate in the formation of the sounds. It may thus be said that there is a natural correspondence between a cry of pain and the cause of that pain. The Analogists, however, if we except Epicurus, were not content to confine themselves to primitive, reflex sounds; like their founder, Heraclitus, they sought—and, of course, found—a mystic correspondence between substances and the names by which they were known. The Anomalists, on the other hand, headed by Democritus, sought the explanation of words in custom, and language to them was the result of a sort of social agreement.

Now, superficially, there is something to be said for both the Analogists and the Anomalists. Language does proceed appreciably by a kind of social ratification; the rhetoric books, to-day, call it "good usage." And, as we have seen, certain sounds are natural to the race, and not to the human race alone. Such views, however, miss entirely the immense importance of verbal evolution. They overlook the intense subjective contribution of man to the words he uses. They indulge in fanciful resemblances between sounds and sense. In brief, their discussion of words is beclouded by words.

Some of those words have come down to our own time, and have colored linguistics to this day. We speak of *etymology,* which to us is the study of word-origins. *Etymos* is Greek for 'true,' and is akin to *eteós,* meaning 'real'; both are akin to Sanskrit *satya,* 'true,' which in turn is related to our own poetic word, *sooth,* meaning also 'true.' A *soothsayer* is a speaker of truth. *Logos,* parent word of all the endings in *-ology,* signifies in Greek a 'word' or a 'doctrine.' It should not be surprising that *logos* is one of the most fertile words in history, for any word that means *word* may take on every characteristic that human experience has lived into words. *Logos,* to the early Greeks, stood for the principle of reason that inheres in the

universe. *Logos,* to St. John, was a name for Christ, the divine word. So, too, in English, the Word stands for the Scriptures as divine revelation.

The neuter form of the Greek adjective *étymos* is *étymon;* it is this form that gives us the English noun *etymon,* meaning either the root of an idea (i. e., its true origin) or the primary form of a word. As applied to language, then, etymology deals with both kinds of true origins—the history of the word as sound, and the history of the word as sense.

When we ask what a certain word comes from (its derivation, which is to say what stream it flows from: Latin, *de,* 'from,' and *rivus,* 'a stream') we are really asking for its *etymon,* or its source.

To the Stoics, however, etymology was the doctrine of true causes; it referred not only to words but to life itself. The Stoics were Analogists. They may be said, in current usage, to have favored the onomatopoetic theory of linguistic origins.

Onomatopœia is a word that has irritated scholars for years, and with cause. First, it is a misnomer; it is Greek for 'name-making,' whereas we employ it to mean the echoing of sound. A word is *onomatopoetic* (or *onomatopœic*) when it reproduces, approximately, the sound of what it is intended to suggest. Such a word is called an *onomatope.* Second, *onomatopœia* is a six-syllable term, clumsy to pronounce, uncertain in accent, distinctly un-English in sound. Its original significance, that of name-making, of creating designations, points back to the importance of names in the eyes of the Greek theorists; between these names and the things named, as we have seen, was supposed to exist a mystical correspondence. The first task of Adam was to pass the animal kingdom in review and bestow upon all the beasts appropriate names. The giving of names has an intimate reference to the early days of magic; names are still endowed with a potency that harks back to enchantment.

It would be well if, for such a near-barbarism and never completely naturalized term as onomatopœia, we were to substitute Jespersen's usage of the word *echoism.* Echoism is

precisely what is meant by onomatopœia; it is but three syllables long; it comes easily from the tongue; it is, and sounds like, English. Less fortunate, though equally easy upon the tongue, is *imsonic* for *onomatopoetic;* it is more patently a synthetic word, however, than is echoism, and is made up of *im* from imitation and *son* from Latin *sonus,* 'sound.' At that, it is preferable to the Greek derivative.

Onomatopes, or echoisms (individual examples of the onomatopoetic process), go back to the sounds involuntarily emitted by the human throat. They are thus, at first, the sound-accompaniment of the reflex response to inner or outer stimuli. It may thus be that the interjection, the unpremeditated outcry, is the oldest sound—next to such primordial sounds as breathing, coughing, sneezing, and the various internal noises—known to man. Through what we have called sympathetic vibration, such outcries, repeated by those who heard them, would tend to become echoisms, or mimicked sounds. We are here upon the shaky threshold of linguistic meaning.

Because Max Müller, in addition to being a learned Orientalist, had also a sense of humor, a number of old linguistic theories, even to-day, are known by some delightfully unacademic names. It was this Oxonian German who, in his IXth Lecture, First Series, on the science of language, scandalized some of his hearers by employing such terms as the Bow-Wow theory and the Pooh-Pooh theory; here, too, he advanced what came to be called the Ding-Dong theory. The joke, ultimately, was on Müller, for in the very act of denying the theory of onomatopœia, he employed it for the creation of two useful, if not dignified, adjectives.

The first two of these theories are closely related by their ejaculatory nature. Pooh-Pooh (interjection), Bow-Wow (echoism) begin alike in reflex vocalism. In the imitative element of echoism, however, there is something more than pure reflex. The imitation of a sound—of an animal's cry—may possess at first an element of involuntary mimicry; it comes very soon to possess, in addition, an element of understanding, an ap-

preciation of the correspondence between the original sound and the human approximation.

Any simple combination of vowel and consonant may thus come to suggest, as indeed it originated in, exultation, depression, anger, pain—all the elementary reactions. *Oh, Ow, Ah, Ha, Pfui, Oof, Whee,* are sounds whose interjectional basis is readily discerned. It has been argued, and rightly, that no language can rise very high with interjections as a foundation. This, however, is not the question we are at present concerned with. The interjections provide a starting-point for speech-elements. And even such crude elements as these undergo a certain development. Such exclamations as *alas,* or even the Latin *eheu,* represent an evolution from the crude interjectional sounds in which they began, but the crude sound is still audible in the word. Words such as the German *ach* (our own *ah*) are the root of terms such as *achen* (German for 'wail') and our own *ache*. From such expressions as *pfui,* or whatever the original sound of rejection was, may develop a slang phrase, "That's phooey," in other words, "That's unpleasant."

When interjection crosses over into echoism, the possibilities of development multiply infinitely. Interjections, in all the languages, have remained fairly stable; they are, and largely remain, primitive sounds. Echoisms, on the other hand, have lent themselves to an evolution that is entirely natural in view of the manner in which the human mind functions. Interjection, as Farrar has said, corresponds to the dawn of sensation. Imitation, on the other hand (i. e., echoism, imsonic treatment, onomatopœia) corresponds to perception.

The Bow-Wow theory is so called from the child's imitative name for the dog. The bark of the dog, to English ears, sounds like bow-wow; it is what noises *sound like,* not what they may be proved acoustically to be, that counts in onomatopœia. The dog thus becomes a bow-wow. Many will recall the song that made Vesta Tilley famous: "Daddy wouldn't buy me a bow-wow . . ." Ever since we can remember, too, we have been told that the country was going to the "demnition bow-wows." This is, to be sure, humorous usage; language process

recks little of dignity, however, and words will be words. The simplest onomatopes lend themselves at once to the plastic uses of communication. A dove makes a sound that suggests, to our ears, the syllable *coo;* it is not long before the warblings of lovers are described by the same sound, and the verb *to coo* is born.

To English ears a rooster sounds like *cock-a-doodle-do;* any one who has heard the cock crow while the moon was still in the West (the words *cock* and *crow* alike have an imsonic origin) knows that these sounds are approximative only. The French hear the same animal cry *coquericot;* the Chinese hear *kiao kiao;* the Manchu, *dchor dchor;* the Italians, *cicerici* (pronounced *chicherichi*); the Swedes, *kukelik;* the Rumanians, *cucuriya.* What is important is not the accuracy with which the sound is reproduced, but the fact that an attempt has been made to reproduce the sound, and that the sound, once established in usage, lends itself to development.

That such later development leaves the primitivities of interjection and echoism far behind does not matter. It may well be that the importance and the intense interest aroused by these later developments, which constitute the greater part of linguistic history and are furthermore substantiated by documentary evidence, have misled outstanding scholars to underestimate the rôle played by interjection and onomatopœia. Müller smiled upon the claims of echoism and interjection, and invented derogatory names for the theories. Yet his own substitute for these claims, which, in the same spirit he christened the Ding-Dong theory, was so fanciful, so mystical, so Analogistic, that he soon abandoned it.

Long before him John Locke knew better. There are no natural words, he writes, in Book III of his *Essay on the Human Understanding;* no specific connection between certain sounds and certain ideas, otherwise "there would be but one language amongst all men."

According to this weakest of all theories, man reverberates, much like a struck bell, with the sound of things. This sound he applies as a name for the thing that causes the reverberation.

Yet, how really distant from the Pooh-Pooh and the Bow-Wow theories is the Ding-Dong? In each, the theorist attempts to account for the origin of a human sound and the relation of that sound to the thing for which it has come to stand. As no single theory can explain completely and satisfactorily the beginnings of sound-significance, so, even in the seemingly most absurd of the explanations there may be a grain of truth.

In the dawn of language, the bow-wows and the pooh-poohs and even the ding-dongs must have served man well; they are still with us, as are vestigial gestures, grimaces and intonations. Many onomatopes lend themselves to incorporation into every process of language. *Splash* becomes an excellent noun and verb capable of full conjugation; so do *hush* and *bang,* and, in the vernacular, such verbal mirrors as *biff, swish* and *whizz. Whist* remains as an injunction to silence and as the name of a game in which silence is more often enjoined than achieved. *Kerchew,* for *sneeze,* inclines toward the comic-strip type of echoism; the comic-strip, however, whether as art or as langauge, is close to the mentality of the child and, by that same token, to the primal process of language.

When Joan of Arc's people called the English *goddons,* they were making an onomatope—and, of course, a noun—from the soldiers' habit of indulging frequently in *goddamns.* So, too, the Mexicans called our military forces—and, by extension, all United-Statesers—*gringos,* from the first words of our song, "Green grow the rashes, O!" In the same way, according to the theory of onomatopœia, were named the beasts and birds when speech was new.

Sanskrit *go,* Greek *bous,* German *Kuh* are thus related echoisms arising from the same imitative impulse that gives us, as a word or symbol for cow, the sound *moo.* Ancient Egyptian *croor* for frog, and *rurr* for pig, and *hepepep* for hoopoe, are likewise sound-imitations. From an examination of the vocabularies of savage nations, Farrar concluded (the italics are his) *that almost every name for an animal is a striking and obvious onomatopœia.*

So the Spanish *azuzar,* 'to excite,' is derived from the sound

zu, used as a noise of encouragement. The French *bourrer,* meaning 'to pursue game,' is traced to the cry *brrr,* employed to frighten the game. Such Latin verbs as *toccare* and *cracare,* giving respectively the French verbs *toucher* (touch) and *cracher* (spit), are traced back to the onomatopœic sounds *toc* and *crac.* If you gutturalize *crac* you get a fairly close approximation to the sound of clearing your throat before expectoration. *Toc* could likewise be made to suggest the sound of certain contacts or *touches.*

Edward Sapir, one of the finest of American philologists and anthropologists, stands as representative of those who reject the interjectional and onomatopoetic theories. "Interjections," he says, "are among the least important of speech elements. Their discussion is valuable mainly because it can be shown that even they, avowedly the nearest of all language sounds to instinctive utterance, are only superficially of an instinctive nature. Were it therefore possible to demonstrate that the whole of language is traceable, in its ultimate historical and psychological foundations, to the interjections, it would still not follow that language is an instinctive activity. . . .[1]

"What applies to interjections applies with even greater force to the sound-imitative words. Such words as 'whippoorwill,' 'to mew,' 'to caw,' are in no sense natural sounds that man has instinctively or automatically reproduced. They are just as truly the creation of the human mind, flights of the human fancy, as anything else in language. They do not directly grow out of nature, they are suggested by it and play with it. Hence the onomatopoetic theory of the origin of speech, the theory that would explain all speech as a gradual evolution from sounds of an imitative character, really brings us no nearer to the instinctive level than is language as we know it today." [2]

Sapir adduces, in refutation of the sound-imitative theory, the fact that among the most primitive peoples of aboriginal

[1] Edward Sapir, *Language* (Harcourt, Brace and Co., 1921).
[2] *Ibid.,* pp. 5–6.

America, "the Athabaskan tribes of the Mackenzie River speak languages in which such words [i. e., imsonic words] seem to be nearly or entirely absent, while they are used freely enough in languages as sophisticated as English and German. Such an instance shows how little the essential nature of speech is concerned with mere imitation of things."

This attitude owes something of its quality, no doubt, to a reaction against such earlier theorists as the Rev. Frederic W. Farrar. Farrar, in answer to Müller's refutation of the interjectional-onomatopoetic theory, wrote in 1865 his *Chapters on Language*. Farrar's work seems to me surprisingly modern, for all the seventy-odd years that have passed since it was written—years of primary importance to the study of languages. He regarded interjection and echoism as "a stepping-stone to true language, by both suggesting the idea of articulate speech and by supplying a large number, if not the entire number of actual roots."

So, too, Whitney, in his *Language and the Study of Language,* employing the selfsame metaphor: "There was doubtless a period in the progress of speech when its whole structure was palpably onomatopoetic; but not a long one: the onomatopoetic stage was only a stepping-stone to something higher and better."

Surely Farrar's last statement is difficult of acceptance; the exaggeration, however, as in the case of the onomatopoetic origin of animal names, should not deafen us to the probability that it advances. Farrar is indeed quite convincing in his discussion of concealed onomatopes; even Sapir is careful to write that sound-imitative words *seem* to be nearly or entirely absent. Much of the absence may, indeed, be seeming. There are even abstract terms—to adduce some of my own examples—in which the onomatopoetic element is hidden by the incorporation of later linguistic forms. The Greek *lalein,* 'to speak,' sounds even now like the exercise of the tongue. *La-la* is derived from one of the first sounds made by the child playing with, or learning control of, its tongue. *Lallation* is the name given to this tongue-play. *Lullaby* is another word

whose *l*'s testify to an origin in childish lingual experimentation. When we sing a wordless melody we revert naturally to lallation—to *la, la, la,* of which such variants as *fal, la, la* and *tra, la, la* are a slightly sophisticated development.

A lesser-known theory, which attempted to account for the beginnings of language without having recourse to the theory of echoisms, is that of Ludwig Noiré; it is nicknamed the "Yo-he-ho." Why "Yo-he-ho"? Because of the rhythmic chant (at first a breath-expulsion) of men engaged in a common physical task. One thinks of Stevenson's "Yo-ho-ho, and a bottle of rum!" One recalls, too, the same expression in the process of becoming a noun, as in Gilbert's *The Mikado:*

> *With a yeo heave ho*
> *And a rumbelow . . .*

Also, there are the Negro chain gangs, and the rhythmic emission of breath after each strong blow of the hammer on the rock-pile. In writing, the sound is conventionally suggested by some such grunting combination as *Hanh.* Such sounds as these, argued Noiré, would give the name to the activity that caused them. The earliest words, then, were associated with communal labor.

Just as imitative sounds are but approximative at best, so are these theories at best approximative. It is impossible to imagine ourselves back in the days of man's first experience with speech. There is reason, for example, to believe that man's sight was more retentive, so to say, than is ours. The conjectural phenomenon has been called, by its discoverer, Rudolf Jaensch, "eidetic imagery," a term referring not to the after-image that is familiar to all, but to a faculty of retaining for a long time the retinal impress of an image. The faculty is found, according to Jaensch and his followers, here and there among children and even adults; it was in early racial life not the exception but the rule.

There may be, in language, some slight evidence for the idea. The very word *idea,* in fact, means an image, and is akin to our word *idol,* from *eidolon,* Greek for the same thing. It

is remarkable that *idea* and the words that cluster about it are associated not only with seeing but with knowing. *Idea* and *wit* are cognates, that is, cousin-words, born ultimately of the same linguistic root. (Sanskrit *vid,* 'to find'; German *wissen,* 'to know'; Greek *idein,* 'to see,' and *oida,* 'I know'; Russian *vidyet,* 'to see.') The connection between seeing and knowing is proverbial; "seeing is believing." Knowledge is a mental image, hence the current meaning of *idea.*

Sight, then, may have played a far greater part in primitive life and thought than it does in our own. We still dream chiefly in images; the imaginal element, when speech was less developed, must have been even greater. Imagination (the creation of images) and ideation (the creation of ideas) are thus linked etymologically as well as in fact. The first alphabets, like so many first "thoughts," were pictures.

Sight, too, may have played a vital rôle in the development of metaphors; if the theory of eidetic imagery is based upon truth, sight must have contributed importantly to the mental, and therefore the linguistic process.

CHAPTER IV

THE "GESTURE" AND THE "LOVE" THEORIES

> Neither English nor any other tongue has yet been intentionally cultivated or developed in a utilitarian, scientific and artistic spirit such as has been applied to, say, the arts of horticulture or mathematics.
>
> In the matter of speech we are still in the position of primitive men—relying on the flowers and fruits which we find growing wild, and making the best and most decorative use that we can of them. Our powers of speech are still all wild flowers—however skilfully we may garland them.
>
> SIR RICHARD PAGET, in *Human Speech.*

§ 1. WIG-WAG; SIR RICHARD PAGET

IF MÜLLER WERE LECTURING TO-DAY HE WOULD PROBABLY have christened the suggestions of Sir Richard Paget as "the wig-wag theory." For, to Paget, a physicist interested in the mechanics of speech, the rôle of bodily movements seems predominant in the early history of language. His conception of gesture is, as it should be, broad. Man, he maintains, was driven to the invention of speech not by the need of transmitting thought so much as by the fact that he required his hands for such fundamental tasks as hunting, planting, and the emergent crafts.

"Originally, man expressed his ideas by gesture, but as he gesticulated with his hands, his tongue, lips and jaws followed suit in a ridiculous fashion. . . . The consequence was that when, owing to the pressure of other business, the principal actors (the hands) retired from the stage . . . their understudies, the tongue, lips and jaw . . . were already proficient in the pantomimic art.

"Then the great discovery was made that if while making

a gesture with the tongue and lips, air was blown through the oral and nasal cavities, the gesture became audible as a whispered sound. If, while pantomiming with tongue, lip and jaw, our ancestors sang, roared or grunted—in order to draw attention to what they were doing, a still louder and more remarkable effect was produced, namely, what we call voiced speech." [1]

To sounds expressive of gestural equivalents, such as *st!, ps!, sch!, brr!,* Heyse gave the name *Lautgeberden,* or vocal gestures. Similarly, there must have been, in the beginnings, gestures that called upon the voice to eke out the meaning. It may well be, for example, that gesture was the first grammar. Man had sounds for things long before he had sounds for relationships. To point was much simpler than to invent, for the occasion, a dative or an accusative case, or a genitive ending. Case endings and prepositions are, from this standpoint, vocalized gestures pointing toward or away from the speaker. It was well along in the history of any language that certain words, once full of meaning, were emptied of their original significance and devoted exclusively to indicating syntactical relationship. The Chinese, indeed, call such words "empty." And it is itself significant, in connection with the gesture theory, that *significant* means 'making signs.'

The gesture theory supplements rather than replaces the others that we have been considering. It is very plausible. Primitive speech must have made far greater use of the whole body than do we to-day. Excitable children and adults talk with their entire body. Paget conjectures that in primitive times the tongue was on occasion protruded; children, again, practise such protrusion, and not only in impudence. We have seen that many persons, in writing and in such employment as the use of the scissors, accompany the manual exercise with mimetic movements of the tongue, lips, and jaw. We still, when released from the dictates of etiquette, "make faces" at each other.

To the prominence of the tongue in primitive life (recall

[1] Sir Richard Paget, *Human Speech* (Harcourt, Brace and Co., 1930).

what has been said of *lallation* and *lullaby*) it may be possible to attribute so essential a word as *love* itself. The Aryan root *lubh* is regarded as a tongue-gesture of sexual significance, to which may go back the offensiveness of the mockingly protruded tongue.

Paget assigns a somatic (i. e., bodily) symbolism to certain consonants and vowels; in this respect he appears to be a scientific continuator of Plato, who does the same thing in his dialogue *Kratylos*. Thus the English physicist advances the belief that *p, b, m,* and *bh* are the essential sound-images of closing, containing, or gripping actions. (As if, indeed, one were holding something between one's tightened lips.) The Aryan root *swap,* meaning 'sleep,' is made up, according to this conjecture, of *sw*—the human eye—and *p,* the closing of the lips that stands for the closing of the eye. Gesture, among other things, is one of the first forms of drawing; it depicts, so to speak, upon the air. Sound-gesture, such as Paget draws upon in this etymology, is precisely what it is called: a gesture that has become sound, that has pictorial symbolism as well as vocal.

In such a view the organs of the mouth and the stream of air issuing through this orifice become analogous to the other openings of the body. Thus, in *mi,* the *i* represents a confinement of the breath-stream, the *m* acting as a boundary. Our ancestors did not share our hyper-æstheticism with regard to natural functions. "It is likely," writes Paget, "that the natural evacuations would be the first things to which man would give names." (It is quite as natural, to other theorists, that the first names should be given, in imitative fashion, to animals. The point is secondary.) "I shall, therefore, take the Polynesian word [*mi-mi*], used to express the voiding of urine. . . . Suppose, then, in the rudimentary state of things we are considering, someone, imagining that he has found a proper term for the act, calls the attention of another to it, uttering at the same time the two syllables 'mi mi,' and that this other individual attempts to reproduce and succeeds in reproducing the sound. Would not the two actions, the one which he was

performing by means of the organs of speech, the other at which he was looking, have a certain resemblance to each other? Would they, in effect, have any essential difference, but that in one there was an ærial, in the other a liquid stream? Is there anything, therefore, impossible in the supposition that he might instinctively feel that the utterance of the sound *mi mi* had in it some certain appropriateness to the act of urinating? . . ."

That we can call both currents (air or water) a stream seems to help Paget's conjecture. The double syllable *mi-mi,* in fact, has become the word for urination, not only in Polynesia but in such far-flung nations as those speaking Sanskrit (*mih*), Greek (*omicho*) and Latin (*mingo*). I may add that the strengthening of *mi* into *pi* is effected by a firmer conjunction of the lips, whence the (to us) more familiar syllables for the same evacuation: *pee-pee.*

M is associated the world over with the closing of the lips after feeding at the breast. Polynesian for nipple is *u,* a labial imitative sound. *U* thus comes to mean 'milk,' 'to be damp,' *'moisture'; ua* is 'rain'; *uma* is 'breast'; *umauma* (two breasts) signifies 'the chest.' The word *mama,* meaning both the 'breast' and the 'mother,' is likewise regarded as a labial imitation. Of this, however, more when we consider the importance of the child and the woman to language.

Related to what might be called the mammary *m* is the onomatope *yum yum,* which is an approximative sound-image of the smacking of the lips that accompanies the enjoyment of a tasteful delicacy. Jespersen mentions the Scotch *nyam* or *nyam-nyam,* and the English seaman's term *yam,* 'to eat,' as well as the French *nanan,* in the sense of sweetmeats. "Some linguists," he adds, in a sentence that makes us think of Paget's derivation of *love,* "will have it that the Latin *amo,* I love, is derived from this *am,* which expresses pleasurable satisfaction."

The sound of eating, in Paget's reproductive scheme, becomes *mnyum-mnyum,* or *mnyamnya*—"words which probably would be almost universally understood, and which ac-

tually occur as a children's word for food in Russian as well as in English." So, too, "the action of sucking liquid in small quantities into the mouth, if 'blown' . . . produces the whispered words *sip, sup,* according to the exact position of the tip of the tongue behind the lower teeth." [2]

The onomatope *yum-yum* achieved personalized celebrity when Gilbert chose it as the name for his heroine in *The Mikado.* Other characters in this famous travesty owe their names to a like personification; Pooh-Bah and Pish-Tush began their lives as interjections. Certainly Yum-Yum was supposed to be sweet enough to eat; since the first form of loving, in the infant, is eating, the derivation of Latin *amo* may not be so fanciful as it seems. In the non-human kingdom love and cannibalism sometimes (as amongst the spiders) achieve a disconcerting identity.

§ 2. LANGUAGE AS LOVE AND PLAY

Yet another suggestive theory of linguistic origins comes from Otto Jespersen, one of the leading experts in the contemporary science of language. Jespersen is no academician; he is, indeed, one of the most humane of philologists. He is mindful, as are an increasing number of contemporary anthropologists, that primitive man was hardly an accomplished metaphysician. The chief concerns of that ancestor of ours were food and shelter and, so far as the beginnings of language occur, instinctual and emotional expression rather than so complex a thing as thought.

"Language," according to Jespersen, "originated as play, and the organs of speech were first trained in this singing sport of idle hours."

The genesis of language, then, "is not to be sought in the prosaic but in the poetic side of life; the source of speech is not gloomy seriousness, but merry play and youthful hilarity. And among the emotions which were most powerful in elicit-

[2] *Ibid.*

ing outbursts of music and of song, love must be placed in the first rank. To the feeling of love, which has left traces of its vast influence on countless points in the evolution of organic nature, are due not only, as Darwin has shown, the magnificent colours of birds and flowers, but also many of the things that fill us with joy in human life; it inspired many of the first songs, and through them was instrumental in bringing about human language. In primitive speech I hear the laughing cries of exultation when lads and lasses vied with one another to attract the attention of the other sex, when everybody sang his merriest and danced his bravest to lure a pair of eyes to throw admiring glances in his direction. Language was born in the courting days of mankind; the first utterances of speech I fancy to myself like something between the nightly love-lyrics of puss upon the tiles and the melodious love-songs of the nightingale."

This is, like other theories, after all but a speculative presentation. It is refreshing, nevertheless, to discover in a philologist a sense of humor as well as of humanity. Language is the product of very imperfect creatures upon whom logic and responsibility to grammar and dictionaries rests not at all. Jespersen, however, disclaims belief in an idyllic prehistory, such as his passage on love and language has suggested to some critics.

"I have never believed," he adds in a delightful footnote, "in a far-off golden age, but rather incline to believe in a progressive movement from a very raw and barbarous age to something better, though it must be said that our own age, with its national wars, world wars and class wars, makes one sometimes ashamed to think how little progress our so-called civilization has made. But primitive ages were probably still worse, and the only thing I have felt bold enough to maintain is that in those days there were some moments consecrated to youthful hilarity, and that this gave rise, among other merriment, to vocal play of such a character as closely to resemble what we may infer from the known facts of linguistic history to have been a stage of language earlier than any of those

accessible to us. There is no 'romanticism' (in a bad sense) in such a theory. . . ." [3]

Jespersen does not, moreover, limit his theory to the expression of love songs; any powerful emotion might result in singing, which is considered, like other forms of play, an overflow of energy. As for the nature of these songs, they need not even have contained definite words; how definite, essentially, are the words of many songs to-day?

"Men sang out their feelings long before they were able to speak their thoughts," says Jespersen. This appears to be a reasonable deduction. Feelings came before thought, as song-voice came before analytic, verbal speech, and as poetry (the expression of feeling) came before prose (the expression of thought). The first songs were in all likelihood a non-communicative, purely expressive, intoned babbling, resembling the unconscious progress of the infant toward speech.

It is no derogation of poetry or of song to discover one of their origins in just such intoned babbling. Alverdes, in his *Social Life in the Animal World,* has written that, "Talking is infectious, and it is impossible to deny that human conversation rests upon the same instinctive basis as the social sounds produced by animals." The communal croaking of frogs, for example, is an evidence of unthinking satisfaction in merely being alive. It may be regarded as an animal equivalent of what, amongst us, is called "small talk."

Malinowski, for what may be called this talking for talk's sake, has invented a high-sounding term: "phatic communion." The chit-chat of his Trobriand islanders is but another evidence of conversation—the sound of the voices of one's companions—as a fundamental element of social and psychological comfort, an emotional reassurance, the vocal evidence or sign of "belonging."

As for the poetic quality of primitive expression, Tylor, in his *Primitive Culture,* long ago anticipated Jespersen, and,

[3] Otto Jespersen has stated this theory at least twice. See the original English statement in *Progress in Language* (Henry Holt and Co., 1894), pp. 354–365. It is reprinted, with inessential alterations, in *Language: Its Nature, Development and Origin* (Henry Holt and Co., 1934), pp. 432–442.

for that matter, the psychoanalytic explanations of creative art. "A poet of our own day," he wrote, "has still much in common with the minds of uncultured tribes in the mythologic stage of thought."

Primitive language, like all creative process, links up with the dream, which to early man was not the sharply differentiated phenomenon that we know and study. "The dream," said Jean Paul Richter, "is an involuntary art of poetry." Poetry, we may add (i. e., creative literature), thus becomes a voluntary art of the dream. This is but another variant of Coleridge's illuminating phrase, "the voluntary suspension of disbelief."

It is possible, however, that Jespersen's use of such terms as poetry and song is misleading, just as the use of such terms as magic has proved confusing to lay readers and even to the specialists themselves. What appear to us as poetry and as magic are not necessarily poetry and magic to the primitive.

Magic, as the newer ethnologists have pointed out, is the best *science* available to primitive man. For his imperfect conception of causal relations it provides as acceptable an answer to his practical problems as does science to ours. Magic is the best he has been able to achieve in the control of his universe; it is sober, serious business to him, not the hocus-pocus of a state magician; it is, in a word, his science.

So, too, with poetry. Figures of speech are far more frequent in the daily speech of primitive languages than they are in ours.

To be sure, as we shall see abundantly, our language is replete with metaphors; but they are no longer felt as such. The metaphor, among primitives, was in more than one sense alive. To us, such speech now appears as poetic; to the man who first made use of figurative language it was as sober and serious a business as was his magic; it was the best he could do under the circumstances and at his stage of development. Figures of speech were attempts at clarification; they were utilities, and clumsy utilities; not, as with us, in poetry, a conscious departure from prose.

As the magic of the primitive is, to him, "science," the poetry of Jespersen's primitive must have been, to him, "prose." To the primitive mind, such as we attempt to reconstruct it, there were no distinct boundaries between feeling and thought, between science and magic. These represent later differentiations, which have not become clear even to the larger portion of the civilized world as we know it to-day.

As language derives from a distinctly utilitarian source, so, too, do such partially linguistic constructions as myth and rite. The myth, the dance, the rite, are poetry *to us,* who can stand outside and above their primitive use as instrumentalities. In fact, we find it impossible to stand inside of and on a level with them; invariably, until we have learned better, we interpret them from the vantage point of our own age and mentality. An aboriginal tribe seemingly abandons itself to an orgy of indiscriminate lust. The very language in which we report the event to ourselves is saturated with our own moral preconceptions. We fail at the very start; our approach is strewn with linguistic snares. Not only is the primitive in question responding to a code radically different from ours; his efforts belong to a mode of science that to us is equally alien. His "orgy" is no orgy at all, any more than the so-called religious prostitution is, in our sense, prostitution. It is a fertility rite. He is invoking the gods to fecundate the soil, even as the men of the tribe are fecundating their women. His passionate belief in the magical potency of imitation is so great that he ascribes to Nature his own response to example.

The primitive, however—and this is the special point—is not poetizing; he is seeking to control Nature even when he implores her or exorcises her.

The law of linguistic evolution, as of evolution in other spheres, shows a progress from chaos to cosmos, from undifferentiated mass to ordered complexity. To have achieved the distinction between feeling and thought, between magic and science, between poetry and prose, is to have reached a high stage of analytic understanding, which is quite beyond the

power of the primitive. When it was reached, it was reached not as a result of sitting down and cogitating upon the difficulties of human psychology, but as a result of actual experience.

Language is not theory; it is experience, it is situation, it is a form of practical action long before it becomes a form of thought. It is even more than action; it is interaction.

Related to such a theory as Jespersen's—and there is a broader sense in which all these theories are interrelated and even interdependent—are the various sexual theories of the origin of language. According to one of these theories, the vowel sounds originated in the sex call. Sucking and breathing sounds (whence such onomatopes as German *saugen,* 'to suck'; Latin *suavis* for 'gentle,' rooted in the sound-imitation *su* for the 'wind' and akin to *susurrus,* a 'whisper'; English *sip, sup, soup*) share a sexual and an ingestive significance.[4]

But why only a sexual call for the origin of the vowel? Why not any call arising from an action necessarily oft-repeated—the cry of warning or of fear, the cry of hunger—each of them more primitive, more necessary to survival, than the cry of sex?

Jespersen's love theory, in association with certain observations of Paget, leads to yet another early aspect of language that has been sadly neglected, especially in the schools. This neglect is responsible for much imperfect understanding of poetry and song, and of words themselves. I refer to the close primitive association of music and language.

§ 3. A NOTE FOR THE MUSICAL

No great knowledge of music is required to perceive the general nature of this association and its importance to speech.

The larynx is a music box; the sounds we make, even without forming definite words, have a transmissive significance. The development of these sounds into an artistic system of emotional communication has produced the art of music. The

[4] A. Berny, in *Imago,* II, 6: "Sexual Origin of Language."

voice came long before the crudest musical instruments, just as hand-clapping and foot-stamping preceded the elementary drum. Instruments are thus projections of, magnifications of, the human voice and the human limbs. "The vocal cords," says Paget, "supply the language of the emotions, and just as our facial expression 'registers' pleasure, pain, surprise, fear, affection, and the like, so the lips of our vocal cords change their expression, and consequently produce changes of laryngeal sound as the air from our lungs is forced out between them. It is the rising and falling of the pitch of the speaking voice which carries the emotional message, while the movements of articulation—remote descendants of the original descriptive pantomime made by primitive man—carry the intentional message which accompanies it." [5]

Language is thus, quite literally, words set to music.

If music has been mistakenly regarded as a "universal" language it is because emotions are more general than words. Music, however, like other languages, undergoes distinct developments. Chinese music is not truly understood by Western ears any more than American jazz music is truly understood by Chinese ears that have not been educated to it.

The academic terms *denotation* and *connotation* may be better understood if the ineradicable musical element of language is kept in mind. Words not only mean; they suggest. They have not only a fundamental significance, but a host of secondary meanings. The fundamental meaning is the *denotation;* the secondary meanings are grouped in a *connotation.* Consider such terms as *unspeakable, unutterable,* and *ineffable.* They all denote, generally, the same idea. Yet the first connotes baseness; the second suggests poetic diction; the third implies exaltation. Such a difference in connotation has nothing to do with the musical element of speech; it is deeply associated with the history of the respective words.

The same word, however, according to the manner in which it is spoken (i. e., sounded) may be made to carry various connotations. The simple imperative "Come!" may, by the musi-

[5] Paget, *op. cit.*

cal differences of the utterance, be made to connote tenderness, impatience, imperiousness, doubt, hope. The power of oratory lies as much in the music of the orator's voice as in the dictionary meanings of the words that he pronounces. In speaking ironically—an effect that is so difficult, not to say dangerous, when entrusted to mere print—the result is achieved by setting the words that one is speaking to a music that manifestly denies them.

This so-called setting goes back to the primitive sounds that we have called interjections, and to the rising and falling of pitch that betrays, wordlessly, our emotions.

Music, like spoken words, has its sound-imitations, its onomatopœia. I am not speaking now of the æsthetic values of music, but of its ultimate origins in the human voice and the human body. When the violins tremble (*tremolo*) they are harking back to just such an onomatope as we suggest by the expression *brr!* for the shivering caused by fear or by cold. When the music becomes faster and faster it suggests directly the palpitation of fear, precisely as Eugene O'Neill suggested it by the acceleration of the drum-beat that throbs through the performance of *The Emperor Jones.* More subtly, when there is a long, slow rise in a melody, or a slow descent, the suggestion is that of a deep sigh. The effect, in the famous "Liebestod" music from *Tristan und Isolde,* or in the final aria from *Aïda* ("O, terra addio!") is unmistakable.

I do not offer these effects as exhibits of good music; generally, indeed, they make one suspect music of indifferent quality, and are as little associated, necessarily, with good music as alliteration is with good poetry, or with good prose. Alliteration—the repetition of a consonant or of a consonant group—is in language a musical effect. So is assonance—the rhyming of vowels instead of vowels and consonants. The essential difference between "quantity" and "stress accent"—that bugaboo of all students of the ancient tongues—is one that cannot be really understood without a knowledge of music. *Versification, indeed, is as much a musical as a verbal process.*

The very word *prosody,*[6] in its two final syllables, -ody, contains the Greek word for *song,* which has given us our word *ode;* it appears not only in such terms as *melody, psalmody, hymnody, threnody,* but also in the ending *-edy* of *tragedy* and *comedy.* Early drama, everywhere, was naturally sung, not merely declaimed. Our pleasure in opera and operetta, regarded as a *convention* in which words are sung instead of spoken, surely derives in part from precisely the opposite source: this so-called convention goes back to a time when song and speech were organically allied; it reaches back to an ancient need. In the grip of great emotion we express ourselves rhythmically and with far greater musicality than in ordinary intercourse.

One of the important relics of music in our speech goes by the name of *intonation,* a word that speaks—or sings—for itself. Language, far more than we realize, is sung as well as spoken. Such tongues as Chinese, indeed, and, in a lesser degree, Swedish, make of tonal differences an essential element of the language; a word, in Chinese, changes in meaning with change of pitch. When we learn a new language it is not only our native sound-system (our phonetics) that impedes our progress; it is our tonal background as well—the music of our language. To learn properly a foreign tongue we must learn not only words and word-structure, but the characteristic melodic outlines of the new language.

The social element of language—what we have called "small talk" or "talking for talk's sake," and what Malinowski has named "phatic communion"—is almost as much music as verbal meaning. Not for nothing do the Spaniards have, for what we irreverently call "hot air," the poetical term *música celestial,* or 'heavenly music.' There must be irony in the adjective; but certainly far more conversation than we like to

[6] *Prosody* has no etymological association with *prose. Prós* is Greek 'to,' and *odé,* 'song.' The Greek term refers to the song sung with another song, and thence to the accent accompanying the pronunciation. *Prosody* is *versification.*

Prose, on the other hand, is from Latin *prosa,* which itself goes back to *prorsus,* meaning 'straightforward.' *Prorsus* is an evolved form of *proversus: pro,* 'forward,' and *versus* (from *vertere,* 'to turn').

Prosody, then, refers to pitch and accent; *prose* refers to direction.

believe partakes of such a "musical," not to say "celestial," nature.

§ 4. THE WORD IS BODY AND SOUL

The theories that have been considered or summarized thus far come under the heading of conjecture. The dawn of language goes so far back into prehistory that unquestionable documentation is lacking. Intelligent guesswork proceeds by arguing from the known to the less known and thence to the problematical unknown. Linguists to-day are still curious as to whether languages evolved from a single source (monogenesis) or from a number of independent sources (polygenesis); they are not too much concerned with the answer, however, any more than they are too much concerned with the ultimate origin of speech itself. Perhaps they are, as a body, too little concerned, since speculation upon any single aspect may shed light on a number of others.

What preoccupies linguists is the manner in which verbal forms and meanings change. I speak of forms rather than of words because language did not begin with what we know as words. Words represent a highly analytical process; primitive man was not an analyst. To understand the evolution of languages we must have a conception of how meaning itself—as distinguished from human and prehuman intelligence—arose and developed; we must know and feel that words (or such sound-clusters as, among our primitive ancestors, took the place of words) are at once sound, form, and sense. The sounds undergo change; the forms undergo change; the meanings undergo change. All is change. Nor is this something that happened in a dim yesterday. It is going on all the time, and will continue as long as man's breath is shaped into meaning.

The study of language primarily from the standpoint of sound is called *phonetics* (Greek *phoné,* 'sound').

The study of language primarily from the standpoint of form is called *morphology* (Greek *morphé,* 'form').

The study of language primarily from the standpoint of meaning is called semantics (Greek *sema,* 'a sign'; *semantikós,*

'significant'). Other names for this branch of linguistics are *semasiology* (Greek *semasia,* 'signification') and *significs.*

We have reached, at this juncture, a partial understanding of what meaning must originally have been. The problem of meaning, in its entirety, is the newest branch of linguistics, and the one that to-day is undergoing the most intensive cultivation. It will throw needed illumination upon the other branches.

Let us summarize the necessary conditions of communicative significance:

Language, in its primitive function, says Malinowski,[7] is to be regarded "as a *mode of action* rather than as a *counter-sign of thought.*" Man's mind, Wells has said, serves the same purpose as the pig's snout: it roots for the means of subsistence. Now, as Malinowski insists, "The structure of all this linguistic material is inextricably mixed up with, and dependent upon, the course of the activity in which the utterances are imbedded. . . . Language in its primitive forms ought to be regarded and studied against the background of human activities and as a mode of human behaviour in practical matters. We have to realize that language originally, among primitive, non-civilized peoples was never used as a mere mirror of reflected thought."

Sounds, in fact, do not begin to *mean* anything until they are found to possess a negotiable utility.

How does this come about? The word *signification,* in the sense of *meaning,* provides the central theme for development. To *signify* is to *make a sign.* A sign, moreover, to our eye-conscious civilization is something printed or painted or written: *design, insignia, signature.* The spoken word, however, is no less a sign than any of these.

A sound is uttered. It is a reflex response to an emotional stimulus.

[7] See *The Meaning of Meaning,* by C. K. Ogden and I. A. Richards, pp. 296–336 (Supplement I).

See also Malinowski's *Myth in Primitive Society,* and his *Argonauts of the Western Pacific.*

That sound is heard by another individual of the same species. This is important, because the hearer must, under similar conditions of heightened emotion, be capable of producing the same, or a similar, sound. It is only thus that the foundation of understanding is laid.

The sound must have a distinct utility. It must serve pleasure or profit.

It must, as one writer puts it, link A (the crier) and B (the hearer) *in a common purpose.*

It must be simple and oft-repeated, so that it may form, together with the situations in which it naturally occurs, a lasting association.

The precise order of these requirements is secondary in importance. Sound acquires meaning through vital associative reflexes. The dog, in the famous experiments of the Russian Pavlov, was first fed to the ringing of a bell. As he saw the food his salivary glands naturally began to excrete saliva. Later, when only the bell rang, and no food was forthcoming, his saliva flowed just the same. His reflex, in Pavlovian language, had been "conditioned." Human intercourse is dense with such conditioning. Much of what we call onomatopœia and interjection must, together with the imitative, imaginative, and social nature of man, have developed such conditioning from the repetitive and essential nature of the reflex.

Once such primal meaning was achieved, the human habit of analogy would tend to multiply it a millionfold.

The flesh becomes the word.

The earliest language is somatic; as it issues from, so it centers about, the body. It is physical; it is, in the slow upbuilding of names and ideas, anthropo-centric, ego-centric, even what I call soma-centric. That is, it uses the species, the self, the body, as the central points of reference.

Body, naturally, becomes one of our words for person, whether alive or dead.

Gin a body meet a body
Comin' through the rye . . .

It turns, as naturally, into the pronouns *somebody, nobody, anybody, everybody.* Even the soul, the opposite of what *body* denotes, had at first to find bodily personification. *Spirit,* originally, refers to the air; *spirare* is Latin for 'to blow,' and is at the core of our words *perspire, inspire, expire, respiration. . . .* To *expire* is to *breathe out;* to inspire is to *breathe in.* When we are inspired, a spirit has breathed power into us. When we speak of a poet's divine *afflatus* we are speaking of his inspiration; for *afflatus* is from Latin *ad* (to, toward) and *flatus,* from *flare,* another word meaning 'to blow.' The root appears in our *inflation,* which may mean either to blow up tires or finances.

Speaking of tires, the word *pneumatic* offers a pretty example of what can happen to the most noble of conceptions. The word is derived from the Greek; *pneuma* is 'air' or 'wind'; it is, therefore, breath or breathing. Like the words for air or wind in many tongues, it easily comes to mean soul or spirit, or even the vital principle. The noun *pneumatic* is defined as "a spiritual being, or one belonging to the highest of the three classes into which mankind was divided." It is a term that belongs to Gnosticism. So, too, *pneumatology* defines not only *pneumatics,* or "the doctrine of air and other elastic fluids," but the "Doctrine of the Holy Spirit." The lungs, in classical Greek, are *pneúmones;* the relation of the word *pneuma* is evident. Hence *pneumonia.*

Language is highly emotionalized.

It is pragmatic—intended to produce immediately useful results.

It deals with the concrete.

It is, *par excellence,* the socialization of the vocal organs.

All these earthy traits of language will tend, under the influence of advancing civilization, to be obscured. Like solid foundations, none the less, they underlie the loftiest constructions of the human imagination. Without them the edifice could not have been built; remove them, and the vast superstructure crumbles to dust.

Without metaphor there could have been meaning. With-

out it, however, language could never have developed into the formidable instrument that now enslaves, endangers, and yet exalts and magnifies humanity. The association of ideas is a winged steed that far outdistances Pegasus; it easily eludes the reins of its rider. To change our mythological figure, metaphor is the true Proteus.

CHAPTER V

IMAGERY AND METAPHOR

Every language is a dictionary of faded metaphors.
RICHTER.
Speech is a dictionary of vanished metaphors. PAUL.

§ 1. MAN IS AN IMAGE-MAKER

LONG, INCOMPUTABLY LONG BEFORE METAPHOR WAS A FIGure of speech, it was a process, a habit, of thought. "Thought," said Aristotle, "is metaphoric and proceeds by comparison, and the metaphors of language derive therefrom."

Metaphor, basically, means a carrying across, a transfer. *Meta* is Greek for 'after' or 'across,' and *phorein* is 'to bear'; *trans* is Latin for 'across,' and *fero,* 'I bear.' The principal parts of *fero* introduce new roots: *fero,* 'I bear'; *tuli,* 'I bore'; *latus sum,* 'I have borne.' A *translation,* then, is a carrying across (i. e., from one language to another). The German word *Uebersetzung* (a setting over) is constructed upon the same image.

Translation, however, need not be restricted to carrying meanings across from one speech to another. We are forever translating the world to ourselves. When the little girl from the city, on her first visit to the country, caught sight of a cow and cried out, "See the horse!" she was performing one of the fundamental acts of thinking: making a comparison between the known and the unknown. The Greeks provide the name for what we call a *hippopotamus,* which, literally translated, means a river-horse. (*Hippos,* 'horse'; *potamos,* 'river.') We laugh at the tiny lass who calls a cow a horse; she quickly learned better. Yet the hippopotamus remains a river-horse. The *leopard,* likewise, remains a lion-tiger (Greek *léōn,* 'lion,'

and *párdos,* 'tiger'), named by the selfsame process that the little girl naturally employed: describing the unfamiliar in terms of the familiar. So, too, the Greek word for *giraffe,* was *kamelopardalis* (*kamelas,* 'camel,' and *pardalis,* 'leopard'). Camelopard is poetic English for giraffe.

Our ancestors discover new countries, and at once the countries are christened New England, Nova Scotia (i. e., New Scotland). Cities of the newly discovered lands are named New York, New Amsterdam. The new is linked to the old by a simple and obvious adjective. Continuity is thus established in a universe otherwise discontinuous.

Our vocabulary always lags behind our inventions. The best that we could manage at first for the radio was *wireless,* because it was a kind of telephony without wires; in the same way the automobile at first was the *horseless* buggy. So we have *fireless* cookers. We link the new with the old, the unfamiliar with the familiar, the unknown with the known, even when the only link we can discover is the absence of a distinctive element: fire*less,* horse*less,* wire*less.*

Metaphorical expression is not only a means of identification and comparison; it is a remarkable instrument of economy. Consider the word *calculus,* which is Latin for a 'pebble.' Because we once reckoned with pebbles, the word *calculus* now names one of the most complicated systems of calculation: the differential calculus. The word includes, then, one of the simplest and one of the most intricate methods of reckoning. The process by which the word for a pebble can rise to the importance of a word that means so involved a system as the calculus is not at all simple; yet it follows a natural metaphorical course in the human mind.

There is, first, for our present purpose, the object and its name. There is, second, what is done with the object. There is. third, something that may resemble the object closely enough to be called by its name. There is, fourth, another resemblance. not so close as the first, yet not too remote. Then there are lesser resemblances, which taper off into associated ideas rather than direct resemblances.

Observe that we are using the language of imagery. An *idea,* at first, was an image. When we speak to-day of ideas we are using a metaphor. When we say that a person has a good imagination, we mean that he is gifted with the power of creating and combining images, which represented thought long before language did, and much longer before writing did.

The Chinese language, which is still written with a conventionalized form of images, provides interesting testimony to the manner in which the mind thinks by means of metaphors. Our own writing, to be sure, is also a conventionalized form of imagery, but the pictorial substance of the letters has almost thoroughly disappeared; besides, our alphabet is phonetic—made up of conventional symbols representing separate sounds, and not, like the Chinese characters, representing entire words. In our writing the image has given us the letters; in Chinese writing the image has given the word.

The Chinese for *difference of opinion* is an image that is read *ni tung, wo si,* and interpreted as "I east, thou west." This has its simple, poetic beauty, and also a powerful linguistic effectiveness. One thinks, for a contemporary similarity, of the song, "Loch Lomond": "Oh, ye'll tak' the high road an' I'll tak' the low road." The imagery is similar in the Chinese locution and the Scotch ballad.

Again, the Chinese for *conversation* is *ni wen, we ta:* "I asking, thou answering." This has a direct Socratic appeal. It is almost too straightforward to be a metaphor, except that the Chinese language, especially in its written form, is literally composed of *figures of speech*—drawings (now conventionalized, but formerly quite recognizable) that stand for talk. In our own language we have an expression that is applied to interchange of speech (or of blows!): *give and take.* This is an image akin, in spirit, to the Chinese "I asking, thou answering."

The imagery of Egyptian hieroglyphics serves likewise to reveal the nature of metaphor as imagery, and the manner in which that imagery lends itself to change. The word *htp* means an 'offering mat.' It is pictured by a rectangle sur-

mounted by a small circle—thus: . The rectangle represents, as simply as may be, a mat, quite as a child would draw it. The circle is a cake, placed on the mat. We are not surprised to learn that this symbol means also 'conciliation.' Let us pause, for a moment, upon the word *conciliation* and notice the different imagery behind the Egyptian and the Roman words.

The essential idea behind conciliation is that of a council or *concilium,* a coming together for discussion, a meeting for planing away differences. When we are reconciled, we come together again after having been divided by differences. When we seek to conciliate someone, we meet with him for the purpose of trying to win him over. The Latin word describes the action. The Egyptian image is more primitive, we may believe. It seems to say: "Let us be friends. See, here is a cake that I have brought for you!" A step lower in human relations and we would have a bribe. Is it altogether a coincidence, men and women being what they are, that the word *bribe* also refers to something edible? To be sure, it is merely French for a lump of bread, or the leavings of a meal; but it is a gift to the appetite, and, under modern conditions it has become considerably more than a scrap of food.

If you will look back at the crude symbol for *offering mat* and *conciliation,* and let your mind play about the suggestiveness of the drawing, you may think up other meanings that could be represented by it. This is precisely what the Egyptians did. One other meaning was "setting of the sun." The rectangle becomes the rim of the world, and the circle becomes the descending ball of fire. We have here, then, almost a visible illustration of how the mind, having created a simple image, makes multiple use of it to express the most unrelated concepts.

Because Chinese writing still reveals, for all the changes that have come over it, a clear descent from image-drawing, it is especially useful at this point to impress certain facts about metaphors. The early Chinese *pictogram* (or pictured repre-

sentation) of the sun was, like that of the Egyptians, a circle with a dot in the center. Now it has become something like ⊟. The circle has been squared, and the dot in the center has become a straight line across the box; the result is called an *ideogram,* or the representation of an idea. The figure of man was originally such a drawing as a child might make of a human being: a circular head, two arms and two legs. The ideogram for man, as distinguished from the pictogram, consists of two lines diverging like legs:

The average Chinese who makes use of these symbols in his daily writing does not know the original sources of his pictograms. A full course in Chinese etymology means not only a knowledge of the sounds of the language, and of the changes that have taken place in pronunciation, but also a knowledge of the changes that have taken place in the pictorial-ideographic representation of the words.

Man is an image-maker. Recently, in a study of *Shakespeare's Imagery and What It Tells Us,* Professor Caroline F. E. Spurgeon tried to reveal some of the inner qualities of Shakespeare's mind by a study of the images in his writings. We may not "betray" ourselves in our imagery—and surely we all make images, after our own fashion, whether we are poets or not—but certainly we cast with our spoken or written imagery a certain illumination upon our deeper life, upon those interests that claim most of our vital attention. This is, to be sure, more true in the case of poets and dramatists and other writers than it is of the man in the street. The man in the street takes his images, like his language, and like too many of his opinions in general, ready-made. Much of his talk, like much of his thought, is merely a higher form of echoism. In

any case, Professor Spurgeon's study suggests perhaps a useful pursuit for students of language—a study of early metaphors and the light that they may throw upon early thought. It is too easy to abuse such an investigation, and, for example, to deduce from the Latin and the Egyptian terms for *conciliation* a definite difference in the minds of these people. It may not be altogether accidental, on the other hand, that Shakespeare is full of images dealing with sports, with movement, with the body, with nature, with birds and, as the professor puts it, with "underdogs."

It is her preoccupation with metaphor, however, that at the moment concerns me. "For I incline to believe," she says, "that analogy—likeness between similar things—which is the fact underlying the possibility and the reality of metaphor, holds within itself the very secret of the universe." [1]

This, in itself, is a metaphorical way of writing. One may say that the more primitive a people, the more literally it feels its metaphors; and the more sophisticated a people, the less vitality the metaphors possess as image. Language is a cemetery of dead metaphors, or, as Jespersen calls them, ex-metaphors. But dead metaphors are far from being dead words. The metaphor dies; the word lives on, unmindful of its ancestry.

§ 2. HOMO MENSURA

In discovering identities and similarities, man naturally began with himself. *Homo mensura* is the Latin equivalent of the famous Greek pronouncement of Protagoras, *panton chrematon metron anthropos:* "man is the measure of all things." This is yet another formulation of what is known as anthropomorphism. Man is the known, the familiar, by which the unknown and the unfamiliar begin to receive definition.

Man's mind works, then, metaphorically; that term includes both metaphor and simile. Theoreticians have special terms for the type of comparison made. It is useful to know the

[1] Page 8 of the work quoted in the text.

terms, since they are employed in the teaching of language and in discussions of style. Nor do they, for all the imposing appearance that they present, involve any difficult ideas. They come, as do such words as *metaphor, simile* and *analogy,* under the general classification of *tropes,* which is to say, *turns* or figures of speech.

The word *trope* is from the Greek, like so many other of our rhetorical terms. The Greeks laid the foundation of our grammatical writing; it is therefore as natural to find Greek terminology in our discourses upon style as it is to find Italian terminology in our discourses upon music. *Rhetoric* is from *rhetor,* a 'teacher of oratory,' which included not only skill in delivery but also skill in composition. According to one etymology, the word is derived from a root *wer,* which is associated historically with our word *word.* The usual distinction between grammar and rhetoric is that between mere correctness on the one hand and stylistic excellence on the other. In grammar we are concerned with matters of right or wrong; in rhetoric we are concerned with the choice between good and better, between better and best.

Trope is from the Greek for turn (*trópos; trépein,* 'to turn'). The original word is *turned* from its proper meaning to a meaning allied in one way or another. Indeed, the precise manner in which the meaning is allied determines the classification of the trope, or figure.

The trope called metaphor we have already examined at length. Two others, especially, claim our attention here: *metonymy* and *synecdoche.* Metonymy (*metá,* suggesting 'change'; *ónoma,* 'name') is a figure of speech in which one word takes the place of another by more or less logical suggestion. We say of a man that he is "a great hand" at building a fire; we refer to a factory operative as a *hand;* we speak of a woman as a dear old *soul.*

Synecdoche (*syn,* 'with'; *ek* plus *dechesthai,* 'to receive'; therefore, 'to receive jointly') is a trope or figure by which a part is made to stand for the whole, or the whole for a part.

In more technical language, the species may thus stand for the genus, or the genus for the species. When we speak of sixteen summers having passed over the head of a maiden, we use *summer* in the sense of *year;* we use a part for a whole. When we say that a person's years have been embittered by poverty, we use *years* in the sense of *life*—a part for a whole. When we call a miser a *pinch-penny,* we denote the genus (miser) by a specific type (species).

It will be seen that the distinction between metonymy and synecdoche is not really important. Every metonymy is a synecdoche; every synecdoche is a metonymy. Recent practice has thus tended to sum up these tropes under the single term metonymy. Both, for that matter, represent a metaphorical habit of speech; for all practical purposes, indeed, apart from the grammarian's love for classifications, Metaphor may stand as the grand term to cover all examples of trope. To-day, when we suffer less than formerly from the primitive confusion between the real and the imaginary, metaphor and analogy are virtually alike. Whether we say of a strong man that he is an oak (metaphor) or that he is like an oak (simile; analogy) we mean to express, and do express, not a sameness but a likeness.

Technically speaking, a metaphor suggests identity, whereas a simile, or an analogy, represents a resemblance. Each of these figures of speech, of course, is based upon likeness added to literalness. Identity goes back to the Latin *idem,* 'the same.' *Simile* is from another Latin word, *similis,* meaning 'like' or 'similar.' It is traced to the Sanskrit *sama,* the Greek *homoios,* the Russian *samy,* the Gothic *sama,* and to English *some,* whether as an independent word or as the ending *-some* in such words as *handsome.* Thus, at bottom, identity and similarity revert to a fundamental significance of sameness. *Analogy,* from the Greek *análogos,* suggests proportionateness, 'according' to (*aná*) 'a ratio' (*lógos,* that Greek word which has a wide and deep variety of meanings and connotations).

When the poet writes, "Ocean, thou mighty monster!", likening the sea to a primitive beast, he creates a metaphor. He establishes, for the purposes of his emotional effect, an

identity between the sea and the beast. The literal meanings of ocean and monster, respectively, are wide apart. The waters in their fury, however, suggest a resemblance to a monster in his fury; to the literalness of the meanings, then, is added a perceived likeness.

Heine, gazing upon the innocent child of his fancy, wrote:

Du bist wie eine Blume
Thou'rt like unto a flower

This is a simile, an analogy. Heine did not call the lass his flower; he wrote that she resembled a flower—she was *like* one. Actually, the terms of the comparison make little difference, except in the matter of style and of emotional effect.

The metaphor perhaps reverts to an older type of perception. If you are driving through the country at twilight with a little girl at your side, and she catches sight of the moon in the sky, she cries out, "Oh, look! The moon is chasing us!" She does not exclaim, "Oh, look! Doesn't it appear as if the moon were pursuing us?" She personifies the moon; it becomes a creature of her own kind. Certainly it looks as if the moon were in pursuit of the automobile; the child, in her innocence of nature and of language, translates the event into an identity. In much the same way, the primitive, gazing at the stormy ocean, could have regarded the phenomenon as a monster in fury. To his anthropomorphic mind it was not *like* a monster; it *was* one.

We all know persons who cringe at the sound of a siren. . . . The word *siren,* as applied to the exceedingly un-siren-like horn of the automobile, or to the blood-curdling mechanism that warns of the approach of a fire-engine, is a metaphor; it implies, perhaps not without conscious humor, an identity between the modern noise-maker and those sea nymphs against whose melodic allurements Odysseus stuffed the ears of his sailors with wax and had them lash him to the mast of his ship. There are many who, against the modern siren, but for a different reason, would gladly stuff their own ears with wax.

The sound of the siren on the fire-engine or the police car

affects the cringing listener by what might be called a physio-psychological metaphor. It sounds like some primal beast rushing in mad delight upon its prey. It rouses a reverberating train of associations. The intelligence of the listener knows well that the sound is caused by the rotation of a wheel—that nothing animate is producing this chromatic yell from what has been named, by trade euphemism, a siren. The emotions respond, however, as if the listener were the goal of this beast on a rampage. Through such experiences as these, some civilized persons—perhaps the same uncontrolled temperaments who make a dash for the closet when it thunders—can understand better than others the origin of metaphors in ancient life, far from the age of literature, from the categories of the instruction book.

The metaphoric and analogic process affects nouns and verbs—things and actions. A thing is, or is like, another thing; a deed is, or is like, another deed. So deeply is this process embedded in language that, however conscious we may become of its presence, there are always evidences of its deeper penetration. The true meaning of the familiar statement that language is poetry—that poetry came before prose—that a more careful use of the tongue for scientific purposes must drain the speech of its emotional content and of its concealed primitive residues, is this: primitive speech reflected the mind of primitive man; it established on every hand living identities and living similarities; words *were* the things for which they stood, and things, through resemblance or suggestion, *became* other things. Language and reality underwent a sort of interfusion.

How long such a period may have lasted is both speculative and secondary; what may be called the metaphorical epoch gave way, eventually, to the analogical. Man began to perceive that likenesses were not identities.

The history of medicine shows a peculiar parallel to this transition in the history of thought. The old Latin adage, *similia similibus curantur,* bespoke the virtues of curing like with like. This principle, in modern medicine, is known as

homeopathy (Greek *homoios,* 'like,' and *páthos,* 'suffering'; hence, the practice of curing by remedies that produce, in the healthy person, symptoms similar to those complained of by the patient). The curing of like by like, however, is older far than homeopathy. The mandrake, for example, is a plant that bears a slight resemblance to a man; therefore, in the folk-lore of many nations, it has been regarded as a specific for barrenness in women.

In the history of theology, too, we have record of an important battle that was waged over the difference between a metaphor and a simile, and that points behind grammar and verbal distinctions to the nature of the human mind. *Homo-ousia* (pronounced *homo-oúsia*) and *homoiousia* (likewise accented upon the *ou* of *ousia*) have but an *i* of difference between them: literally an *iota* of difference. Yet that *iota* (Greek for *i*) split the world of the fourth century with controversy. *Homos* is Greek for *same; homoios* is Greek for *like; ousia* is Greek for *substance, being, essence.* The homoousian differed from the homoiousian in believing that the Son was of the *same* essence with the Father—that he was co-substantial with Him; the homoiousian believed that the Son was *like,* but *not identical with,* the Father. In the dissension we have a deeply human illustration—one of the most dramatic afforded by history—of the essential difference between one figure of speech and another.

Man, as the measure of all things, measured himself against creation. That is, whatever he beheld he interpreted to himself in terms of himself. Life, in language as in thought, became an extension of his body. That is why we have so many somatic metaphors. (*Soma,* Greek for 'body.') This is such a natural process that we never think of it when speaking of the *head* of a table, the *leg* of a chair, the *foot* of a bed, the *heart* of a problem (or the *core,* which is the same thing: Latin, *cor,* 'heart'). We refuse to *swallow* a story; we cannot *stomach* certain persons or ideas; we like men of our own *kidney.*

Is there a part of the body that has not provided a word for

the language? Not only a word, but an entire vocabulary? Think, without recourse to the dictionary, of the various meanings for *head* or *foot*. Many other words that contain such derived meanings will not occur to one untrained in linguistics, but they are there nevertheless. A *chief* is a *head man*. (Latin *caput,* 'head,' through the French, *chef*.) A *captain* is also a *head man;* the German word for captain reveals its derivation in terms more clear to the speaker of English: *Hauptmann*. In the same way, the Latin word for foot—*pes, pedis*—, which is cognate with the Greek *pous, podos,* appears in such derived meanings as *pedestal, pedestrian, pedals, pedicure*.

From likening things to his own body, man proceeds naturally to the likening of things to other things. The process is an extension of the fundamental principle: to compare the unknown with the known. It is this that we have in mind when we say that without metaphor language could not have been. A may suggest B, B may suggest C, C suggests D, D suggests E; by the time we have come to E, however, all true resemblance to the original A may have disappeared.

It is easy, for example, to see that a head of lettuce suggests a human head. The French word for head, *tête,* is from an intermediary word in the Latin of the common people, which was not at all like the classical Latin that we learn—or at least study—in school. The classical word *caput,* through such developments as *chef,* provided, for French, secondary meanings; the word for head itself—the portion of ourselves that rests upon our necks—comes from *testa,* which meant, of all things, a pot. Evidently, it was at first just such a jocular metaphor as we have in mind when we speak of a man's *bean,* or his *coco* (short for *coconut*). We speak of the head of a pin; we speak also of a *pin-head,* meaning one whose brains are of the size that would be containable in a head the size of a pin's head. Once we allow our imagination—that is, our power of making images—to run riot, there is no telling where it will stop. In fact, it never stops. It is forever at the task of detecting and inventing new associations.

Language is a veritable deposit of dead metaphors. As coal bears the imprint of the leaves that went, in ages past, to help convert vegetable energy into mineral energy; as the various strata of the earth yield up, to human delving, evidence of civilizations that long since crumbled to dust; as a palimpsest surrenders to the eye of the investigator inscriptions that lie concealed beneath other inscriptions, so does a word or a usage often reveal a living significance that died out in order that another, a related significance, might live.

Let me offer the first example that comes to mind. The word *economy* comes from the Greek *oikos,* 'a house' (which is related to Latin *vicus,* 'a village'), and *némein,* 'to manage.' The oldest meaning of *economist,* in English, is that of a housekeeper; in Greek, too, *oikonómos* meant 'housekeeper.' From such a fundamental significance it was logical to extend the meaning so as to include management of any interest, however large. *Economics* thus comes to signify the study of the production, distribution and consumption of wealth. Such an extension implies an old metaphor—the conception of the country and its government as a home. We still speak of our *homeland.*

Few people, however, when using any of the words derived from *oikonómos* know, or need know, that its first element is from a Greek word for home. Nor need they know that such a word as *domestic* is derived from the Latin word for home—*domus.* Nor need they feel that in such a phrase as "domestic economy" they are really saying "home home-management." The feeling of the home idea in *domestic* is still strong; the feeling of the home idea in *economy* is, for all but linguists, atrophied. Words for home, like other words, have a habit of straying far from home, indeed.

§ 3. DREAMS—MIXED METAPHORS

Because so much of primal language material becomes atrophied, it is possible to go on speaking without an uncomfortable awareness of the elements that went to make up the

words we use. Frequently, in fact, the difference between what we call a mixed metaphor and an acceptable form of speech is determined by such awareness or lack of such awareness. By such analogies as we can think of, it would appear that our remote ancestral speech was a distinctly slower process than later enunciation. Thought and mental imagery must have been correspondingly hazy and slow. Since sight is a much more primitive faculty than that of developed speech, we must —as a species—have seen long before we really spoke. Certain rude classifications, in fact, especially of shape or color, must have been suggested to the eye (that is, to the consciousness, through the eye) far in advance of their recognition by language.

It is questionable whether, to the primitive mind in its gradual construction of articulate speech, there was any greater consciousness of metaphor than there is in us when we say that "the kettle boils," or when we speak of a "disaster." Just as, in our imagined beginnings, we distinguished hazily between dream and reality, so we did not distinguish between reality and that imagery, that picturization, called metaphor. All metaphor implies, as all dreaming implies, imagery. In dreams we not only see; we say, as well. Just what we say is not here the question. The process, however, has linguistic connotations; Freud finds that wit and dreams reveal a striking similarity of technique.[2] Metaphor is a kind of spoken picture. A Brazilian poet calls a volume *Sounding Canvases.*

The mixed metaphor is, from its very construction, a late development. It could not occur until the pictorial element in a given phrase or locution had faded into indistinctness. The juxtaposition of two incongruous word-pictures serves to bring back strikingly the faded images and to render the words for the nonce graphic once more. The more conscious one becomes of etymologies, the more one sees that language contains thousands of mixed metaphors; these remain unquestioned only because the images have been forgotten, or have faded beyond restoration.

[2] See *Wit and the Unconscious,* New York, 1916.

I am concerned, for the moment, with the metaphorical, therefore the imaginal, element in what we must consider primitive speech to have been.

There are interesting collateral speculations. According to psychoanalysis, and not to this theory alone, dream-imagery is a pictorial language. By means of these seemingly incongruous dream-images the dreamer is making a statement that has to be translated into the spoken language much as the Rosetta Stone had to be deciphered. Dreaming is a complication of metaphors. I am aware that the primitive, especially our imaginary prelingual primitive, must have dreamed different images from those that we dream. My dreams and yours are often determined by our speech-habits; they exhibit condensations (like Lewis Carroll's so-called "portmanteau words") and other charade-like processes. What is important at this stage is the ancient nature of imagery in man's waking and sleeping existence, and its share in shaping his language. Dreams are riots of mixed metaphors, and must have been even more riotous in the prelingual era.

Not for nothing does *I see* mean 'I understand.' Sight, among the senses, easily predominates as a synonym for comprehension. "Seeing is believing."

To step for a moment across the boundaries of our discussion, symptoms of nervous ailments frequently adopt a metaphorical character, in that they point to an organ that is not at the root of the trouble. How much, for example, are the heart and the stomach metaphorically abused by hypochondriacs. This misunderstanding of symptoms early found its way into language.

I develop, together with a persistent case of insomnia, a wracking pain in the left instep. It seems so definitely organic that I begin to fear bone-rotting, gangrene, amputation. I point to the spot and say to the physician, "My instep hurts terribly." The doctor, after X-ray examination, assures me that the bone is not involved. My nerves are deceiving me. I then say, "Well, it certainly feels *as if* my instep were being crucified." With that *as if,* and the new knowledge it connotes,

I have progressed from metaphor to simile—from the establishment of a false identity to the enlightened awareness of a similarity.

Life, more than we realize, is no less than language a combination of similes—Vaihinger's *Philosophie des Als Ob,* the philosophy of *as if*—and metaphor. We cannot hope to grasp —and even then, imperfectly—more than that restricted segment of reality which immediately concerns us. Vast areas remain beyond the perception of our senses. We live, as language lives, by vital fictions. In a deep sense, reality is the greatest metaphor that the human mind has ever conceived. And it will be useful to remember that at bottom all that reality means is *thingness.* The highest flights of language carry us but a very short distance from our body, its material functions and its material surroundings. The everlasting wonder is that with these wings we should be able to fly to such dizzying altitudes.

Language cannot escape æstheticism and imagery, not even when it congeals into the symbols of mathematics. For those symbols are, as letters of the alphabet, themselves congealed and abstracted images.[3]

Certainly one of the worst mixed metaphors in any language is to be found quoted by Erdmann in his excellent book *Die Bedeutung des Wortes* (*The Meaning of the Word*). *"Der Zahn der Zeit, der schon so manche Träne getrocknet*

[3] Mr. Scott Buchanan, in a tightly packed monograph, *Poetry and Mathematics* (The John Day Co., 1929), points out in his chapter on "Symbols" that "mathematics for a mathematician also has æsthetic properties. . . . Nine tenths of the skill with number and formulae in mathematical technique is due to an æsthetic appreciation of symbolic form. It is achieved in the same manner that the appreciation of sculpture and music is attained. The position of words in a poem, the flow of terms in a formula, present qualities and values as truly as the flight of birds, the frost figures on the window-pane, or the march of moon and stars across the sky. . . . The extraordinary position and power of proportions in mathematics and the essential metaphorical character of poetry are thus not mere accidents of history, but the key to an inward dialectic of thought. It is by expansion of metaphor that thought becomes intelligible, the world measured, and the complexities of experience described in language. Any history of thought might begin and end with the statement that man is an analogical animal."

hat, wird auch über diese Wunde Gras wachsen lassen." I translate it literally:

"The tooth of Time, which already has dried so many tears, will also let the grass grow over these wounds."

It is worth while analyzing this small catalogue of catachresis (*catachrêsis,* accented on the marked vowel, is Greek for 'misuse'; it is applied to figures of speech in which words are wrongly used for other words, as in mixed metaphors).

"The tooth of Time, which has dried so many tears . . ." Time, as an element that consumes, is at first likened to a huge monster with teeth that eat up existence. Time also dries tears—that is, with the passing of time, our griefs are softened. In this section of the badly mixed metaphor, Time, without notice, is transformed from a toothed monster to a long period over which tears are wiped away, as by a kindly hand. "To let the grass grow over" anything is to allow time to pass. But teeth ("the tooth of Time") do not let "grass grow" over anything, especially over wounds. Nor does grass grow over wounds in the first place. Time, in the way that it dries tears, also heals wounds. But not by bandaging them with grass.

The mixed metaphor is, as the name indicates, really a combination of metaphors in which the amalgamation is noticeably incomplete.

Dr. Friederich Polle, in a collection of metaphorical curiosities,[4] quotes a confusion of color. *"Wenn die Blaubeeren noch grün sind, sehen sie rot aus, wenn sie reif sind, schwarz."* Literally this reads, "When blueberries are still green, they look red; when they are ripe, they are black." Green, of course, here stands for unripe.

How much different is it when we speak of "the height of the depression," or hear a child cry out, "The *air*plane is *land*ing in the *water!*"

Everyday, on the radio, it is possible to hear such metaphorical mélanges as "screen scoops flashed to you from the

[4] *Wie Denkt das Volk über die Sprache?* (*How Do the People Think about Language?*) 2nd enlarged edition, p. 98.

heart of Hollywood." It is questionable whether one hearer in a thousand feels any greater sense of incongruity here than when he reads that "there has been rioting in the heart of Paris." It is not only questionable: on the whole it may be fortunate.

Almost as bad as the examples from Erdmann and Polle are the examples quoted by Vendryès in a work that should be much better known (this applies also to students) than it is.[5]

"To navigate the car of State over a volcano" produces a shockingly funny picture in one's mind. It is hard to believe, too, that anyone could soberly describe a debutante as a "budding star who already sings with a master hand." Frenchmen say, without the approval of their more exacting countrymen, such things as "embracing a career," or "enjoying bad health." But they also say—and their usage is paralleled by our own—that they "arrive" at a certain place. *Arrive,* traced back to its beginnings in Latin, means to reach a river-bank, and if we had remained conscious of that derivation from the earliest days, we should have felt now the incongruity of arriving anywhere else than on the other side of a stream. One of the troubles with purists in language is that they do remain too conscious of such origins. In the seventeenth century, Vendryès reminds us, certain purists of the Academy insisted that you could not *fermer* (shut) a door. They wanted France to say *pousser la porte; fermer* was allowable for *chambre.* You could *fermer* a room but not a door.

Such an attitude toward language would, like any other type of purism carried to logical extremes, serve to paralyze speech. For these are catachreses; he calls them *cacologies.* (Greek, *kakos,* 'bad,' and *logos,* 'speech' or 'expression.') To be too conscious of linguistic origins would be to detect, in every other word, a cacology. Fortunately for humanity, it can forget, and forget not only words.

[5] I refer to the Frenchman's *Language,* of which a good English translation by Paul Radin is available. The examples are taken from pp. 178 and 179 of that translation.

How much of a catachresis or cacology is the familiar example taken from Shakespeare's *Hamlet?* "To take arms against a sea of troubles . . . ?"

Originally, 'to arm oneself' (Latin *armare*) signified to cover the shoulder. The plural, *arma,* signifies what we mean by arms—protective or offensive weapons. In the history of South American independence there is a famous episode in which a band of *llaneros,* or plainsmen, in the ardor of combat rushed into the ocean on horseback, lances raised, against the Spanish ships. Here, indeed, was a case of taking arms against a sea of troubles!

Now, according to Aristotle, Strabo, and other writers, the Celts of old had a similar custom. "They throw themselves into the foaming floods with their swords drawn in their hands." [6] Shakespeare may have known far better than the generality of his commentators. Nevertheless, our ignorance of the sources upon which he drew for his imagery renders us insensitive to the truth of such metaphors as these. Reading the soliloquy of Hamlet to-day, and coming upon this passage, we are rather reminded of the story of King Canute and his foredoomed attempt to sweep back the waves of the ocean. Far more reprehensible than Shakespeare was the college professor who, lately reviewing a book, wrote of it in the heat of enthusiasm that it was "the greatest story of a flood since Genesis. It has all succeeding floods laid by the heels."

Just as language is full of excellent metaphors so well assimilated that we have lost all consciousness of their original pictorial values, so is it full of concealed metaphors many of which analysis would reveal to be badly mixed.

We say, for example, that a fire has been extinguished. *Extinguere,* in classical Latin, had the meaning of putting out a fire or a flame. When, to-day, we speak of a species as being extinct, we do not think of the species as having been put out like a light. The first meaning of *extinguere,* however, even

[6] The quotation is to be found in Fleming's translation of Ælian's *Histories,* 1576. See the edition of Shakespeare published in 1901 by the C. T. Brainard Publishing Co., Boston and New York, Glossary to *Hamlet,* Vol. XIX. p. 207.

in Latin, was not to put out a fire. It was to blunt the edge of an arrow. The process of mind that compared the blunting of an arrow to the putting out of a flame may be guessed at, especially when one thinks of the tongues or arrows of flame. There is a sense in which all metaphors are mixed, at first. So, too, the word *obliviscor,* in Latin, means 'I forget.' It is akin to our word *oblivion.* There was an earlier meaning, however: 'to fade,' 'to turn yellow,' as do the pages of a book, or the leaves of a tree. *Obliviscor,* then, compares the mind to a page that, with the passing of time, fades away.

Early metaphors could hardly be felt as mixed because the feeling of identity was powerful. The sun *was* a ball of fire sinking into the flood. The star *was* a "shooting" star. The perception of a mixed metaphor or of a mixed expression suggests an advanced stage of linguistic awareness, an ability to analyze.

Consider this sentence from John Dos Passos' novel *The Big Money:* Doris says to George Duquesne, "Charley was one of our star aces."

The contemporary reader appreciates the expression without trouble. He knows that Doris is praising Charley as one of the country's foremost aviators. That *star,* from its status as a noun, has become an adjective, need not concern us now. Both *star* and *ace* have come to mean, in English, prominent representatives of a profession or activity. A great actor or actress is a star; the comparison is to the brilliance of a star in the heavens. An ace did not always mean the highest representative of a calling. In fact, one of the definitions found in the dictionary is that of "a very small quantity or degree." Originally (Latin *as, assis*) it stood for unity, a unit of coinage, and the coin so minted. One is a small number; but to be "number 1" in a list is to be the first, and therefore to lead. The ace, in cards, is in many games the card of highest value. So that *ace* acquires a connotation of leadership, of primacy, of uniqueness.

Here, then, we have two words, *star* and *ace,* the one associated with the sky and the other with coinage; only later did

the second become a name for a card with a single spot upon it. Each acquires a connotation of excellence, of outstanding significance. Each gradually loses some of its original force. In the combination "one of our star aces," the word *star* even loses its noun force, and becomes a mere modifier for *aces*. It is most likely that Doris, speaking these words to Duquesne, felt not the slightest vestige of the metaphors implied in her words. This is, especially for prose, the normal course of events.

Many a person opens his newspaper and reads without any sense of incongruity that a sale of "American Orientals" is being held. The noun *oriental* has ceased, or half-ceased, to mean a rug woven in the Orient; it has come to mean a rug of a certain design and coloring. When American manufacturers adopt that design and coloration, the Oriental becomes indeed American.

In the same way, not everyone feels a sense of incongruity when he attends what has been advertised as a "midnight matinee." *Matin* is French for 'morning'; *matinee* regularly applies to a performance given in the afternoon; a *midnight matinee,* then, if read literally, would mean some such nonsense as "a morning-afternoon performance given at midnight." What has happened to make such a contradiction as *midnight matinee* acceptable without demur by a theatrical public? *Matinee* was at first the opposite of *soiree. Soir* is French for evening, and a *soiree* is an evening reception. *Matinee,* then, readily came to stand for any reception or performance given in the daytime. As such, it became the opposite of evening performance. As such, also, it readily came to mean *any performance except that of the regular evening one.* A *midnight matinee* is thus easily understandable, though one questions whether careful usage would sanction it.

There is a similar confusion with the musical terms *serenade* and *aubade.* The first of these words has become familiar English. Few associate it with the French word *soir* in its Italian form *sera.* Technically speaking, a serenade is a musical salutation played in the open, for ladies, at night. The

Italian form is *serenata;* our form comes from the French, as does *aubade.* A serenade, then, etymologically and historically, is essentially *an evening-piece.*

The *aubade* is just as essentially a morning, or, to be more precise, a dawn-piece. *Aube* is French for 'dawn,' being derived from Latin *alba,* which in turn derives its meaning of dawn from the characteristic whiteness or brightness of daybreak. The *alb* of the priest is so named because it is a full-length ecclesiastical vestment usually of white linen. So easily, in the case of such words as *aubade,* is the etymological and historical meaning of the word forgotten, that *Webster's New International Dictionary,* after indicating the character of the aubade as "a piece of music to be performed or sung at dawn," adds the second definition, "an open-air morning serenade."

Literally interpreted, "morning serenade" would be a "morning evening-piece," which sounds formidably like a catachresis. It is but a step removed from "midnight matinee," but that step is an important one. In the case of the midnight matinee many of us are quite conscious of the incongruity; the expression is still felt to be a mixed one. *Aubade* and *serenade,* on the other hand, are not felt with such opposing force as are *matinee* and *midnight. Gasc's French Dictionary,* for example, likewise defines *aubade* as a "morning serenade." The word *serenade* appears to have all but lost its relationship to evening; what is left is the idea of a musical salutation. I doubt that it would occur to anyone to define a *serenade* as an evening aubade. Perhaps that is because the more familiar word established itself earlier; serenades, in fact as well as in etymology, go better with twilight.

As we hear of "musical soirees on Sunday morning," of "morning serenades" and "midnight matinees," so we read, even in *Ivanhoe,* of "morning vespers." *Vespera* is Latin for 'evening,' and is akin to Greek *hesperos* and perhaps our word West. *Vespers* are evening prayers. But even the Church interprets the term freely, since some churches have afternoon vespers.

In the first issue of a new magazine, in an article devoted to problems of airplane transportation of passengers, I come upon this phrase: "In December, 1936, after a veritable carnival of disaster . . ."

Certainly the writer felt no incongruity in his words, else he would not have set them down. Let us break the words into their original images. A *carnival* is so named because it is a feast that takes place before Lent; at that time meat is abstained from. Latin for 'meat' is *caro;* the Italian word is *carne.* One explanation of the term regards the *-vale* element as signifying 'good-bye,' or 'farewell'—i. e. to meat. (Latin, *vale,* as in the phrase, *Ave atque Vale,* 'Hail and Farewell!') A less fanciful etymology is that of *carnelevale,* or the putting away of meat. (Latin, *levare,* 'to raise' or 'take away'; for, when we lift an object, we take it away from its position.) In any case, the word suggests a temporary abstention from meat. Why its meaning of merrymaking, then? Because of the high spirits associated with the observance. Nobody, to-day, thinks of the meaty origin of the word, unless he be a churchman or a philologist. I have heard a radio announcer, advertising a restaurant, inviting his listeners to "a carnival of steaks." This was almost as incongruous as "a veritable carnival of disaster."

The word *disaster* we may pass with little comment; almost everybody interested in words knows that it means an unfavorable star, and that it goes back to the superstition that stars influence destinies. Unfortunately, astrology is still attractive to certain sections of the public.

In such phrases as "a carnival of crime" there is a certain justification for the use of the noun *carnival.* It suggests riotous pleasure, and, by a slight extension, can be applied to malicious or sadistic pleasure; the connotation of transgressing bounds is already present. A "carnival of disaster," on the other hand, applies the noun to events that are beyond human control, and thus brings sharply into collision one word suggestive of pleasure and another suggestive of grief. Far more

metaphors than we realize are mixed metaphors; metaphors such as these, however, emphasize by unfortunate juxtaposition the violence of the mixture.

§ 4. PROSE IS POETRY

Prose is, and necessarily, saturated with poetry. It is, as has often been said, fossilized poetry. This is another way of saying that it is composed largely of dead metaphors and similes, of dead analogies.

What is the most prosaic element in modern life? It would be hard to give an absolute answer, but most people, perhaps, would answer that it was money and the pursuit of material gain, as distinguished from the more spiritual aspects of the higher living. What, then, could be more prosaic than the language of a stock company, with its annual report, its assets and liabilities, its surpluses and deficits?

Yet, so poetic is the substratum of language that even in this vocabulary of the market-place is to be discovered a deep residuum of figurative language.

Begin with the word *money,* around which all this commercial activity revolves. To discover its origin one must turn to a classical dictionary and look up the entry *Juno.* Offhand, it seems silly that the word for money should come to us from a Greek goddess. Investigation, however, makes the mystery clear. Juno was a goddess with many attributes. Her name, in its earlier form, Jovino, is a feminine form of Jove. She was worshiped in numerous forms, especially in Italy, as the queen of womankind. She was Juno Lucina, that is, the bringer of light; she was Juno Sospita, the savior; she was Juno Quiritis, armed with a spear; she was Cinxia, she who tied and untied the marriage girdle; she was Pronuba and Iuga, goddess of marriage; as the wife of Jupiter she was Juno Regina. And, directly to our purpose, she was Juno Moneta, the admonisher, occupying a temple on the Capitol, dedicated to her out of gratitude for her helpful monitions.

It was in this temple that money first was coined in a mint,

and called *moneta,* in Latin, because it was minted in the temple of Juno Moneta. Thus our word *money,* derived from *moneta,* comes from the Latin word for admonishment.

The word *mint,* of course, is one of the forms evolved from *moneta,* through the Anglo-Saxon *mynet. Moneta,* from the verb *monere,* 'to admonish' or 'warn,' is akin to English *mind,* which, in its kinship with Old High German *minna,* meaning 'memory of love' (Minnesinger, 'singer of love songs'), brings in a new train of associations that carries us far indeed from the love of money.

So much for that which has been stigmatized, erroneously, as the root of all evil.[7]

Let us investigate the original meanings of the other commercial words and phrases: *annual report, assets* and *liabilities, company,* and see how impregnated they, too, are with the poetry of things.

Annual report. Report is relatively simple; it stems from Latin *reportare,* which, in turn, is the prefix *re,* signifying repetition in time or space, and *portare,* 'to bring' or 'bear.' A *porter* is one who bears; a *reporter* is one who brings back news. *Porter* is still literal in meaning; *reporter* is figurative. The *report* is what is brought back. *Annual* is far more poetic. *Annus* is Latin for 'year'; *annualis* means 'yearly.' *Annus* itself, however, meant in Latin 'a ring'; in French, the word is *anneau,* from the Latin *anulus* or *annulus.* The year was the *ring* or round of the seasons.

Assets is the French *assez,* 'enough,' from the Latin *ad satis. Satis* is discernible in our *satisfaction. Satis* is akin to Gothic *saths,* meaning 'full.' *Liabilities* are obligations; in both these words, the essential idea is that of being bound. *Liable* is from Latin *ligare,* 'to bind'; so is the second element of *oblige.* A *ligature* is something to bind with, a bandage. A *ligament* is something that binds, especially in the body. Less obvious derivatives of the same Latin root are *league,* a binding of groups or nations; they who are thus bound are *allies; allies*

[7] See, for the exact wording of a much-misquoted passage, Paul's First Epistle to Timothy, VI, 10.

is etymologically linked to *league, ligament, ligature,* and all words containing the element *lig,* as *obligation. Allies,* incidentally, was during the Great War the most frequently mispronounced word in the language; the accent, whether for verb or noun, is on the final syllable. If we were concerned, at the moment, with pronunciation rather than with etymology, we might make out a case for the mispronunciation. The natural instinct of the speaker is to make an accentual distinction between nouns and verbs that sound alike. We make *prógress* (noun) and thus *progréss* (verb). The noun commonly accents the early syllable; the verb accents the later. In the case of *ally* the rule does not hold.

Ally is derived ultimately from Latin *ad* and *ligare,* 'to bind to.' Latin *alligare* (the *d* and the *l* of *adligare* were assimilated to one another) gives in French *allier,* whence our word is taken. As to why the *g* should disappear in the evolution from Latin to French, such changes comprise a study in itself, and we shall know much more about it when we come to the consideration of linguistic change. To have a *liability,* then, is to be bound to someone. It is not pleasant, but it *is* a poetic usage. So, for that matter, is the word *bond* in the phrase *stocks and bonds;* it is the same word as *band,* in the sense of a fastening; for a *bond,* too, is an *obligation.* It binds.

As for *surplus* and *deficit,* they are less exciting as words than as facts. *Deficit* is Latin for 'it is wanting'; it is the third person singular present indicative of the Latin verb *deficere.* It is obviously akin to such of our words as *defect, deficiency,* and so on. *Surplus* is from the French *sur,* 'over,' and *plus* 'more.'

Company, however, brings us back to poetry. *Companion,* originally, was the one who ate bread with you: Latin *cum,* 'with,' and *panis,* 'bread.' From such a circumstance the derived meaning of association grows inevitably.

It is all but impossible to trace to its origins any word, even the most seemingly prosaic, without realizing how much it has been altered by the figurative habits of the human mind. Inevitably, through words, we effect a metaphorical transfor-

mation of reality. Words are a way of turning reality to our private ends, of holding it in suspension, of toying with it, of experimenting with it, of remolding it—if only in imagination—nearer to the heart's desire.

"Il y a plus de quarante ans," said M. Jourdain, Molière's bourgeois converted into a gentleman, *"que je dis de la prose sans que j'en susse rien."* "For more than forty years I have been speaking prose without knowing it." His discovery was hardly as important as Columbus'; it satirized the delight, and the false sense of power, with which all of us learn a high-sounding name for the things we have been doing all our lives.

A more important discovery is the fact that all our lives, whether as individuals or as the human race, we have been talking *poetry* without knowing it.

CHAPTER VI

THE WORD AS MAGIC

Words expressing desire may be more moving than the presence of the desired person. The hatred we feel at the sight of our enemies is often less intense than the hatred we feel when we read a curse or an invective. ALDOUS HUXLEY, in *The Olive Tree,* on "Writers and Readers."

. . . To have more words and to attend more to words is not simply to increase mental power; words themselves are powerful things and dangerous things. H. G. WELLS, in *The Outline of History.*

Krut, sterne, unde wort
Diu hant an kreften grozen hort.

Herbs, stars and words
Of power they have great hoards.

FREIDANK [1]

§ 1. THE EVIDENCE OF ETYMOLOGY

THE LIFE OF THE PRIMITIVE WAS SATURATED WITH magic. His magic was a form of mysticism, for it was bound up with everything that occurred. It was bred of ignorance, of insecurity, of the superstition that all things, animate or inanimate, were endowed with potency for evil or for good. The word, to one who did not know writing and experienced it only as utterance, naturally shared in this potency. Evidence of this power is to be found in the history of words themselves.

There are few words in the language, even to-day, that ring with more mysterious suggestion than the word *Fate.* It connotes finality; from it there is no appeal. Yet all that it signifies is "that which has been spoken," from Latin *fari,* 'to speak.' The simple fact of capitalizing the word seems to

[1] Quoted by A. F. CHAMBERLAIN in *The Child: A Study in the Evolution of Man.*

add to the magical effect. This is part of the symbolism of writing, of course. The plural of *fatum,* which gives us the word *fate,* is *fata;* it gives us these strange figures, the Fates, named in Greek mythology Clotho (the spinner), Lachesis (the disposer of lots) and Atropos (she who snips the thread that Clotho has spun, and of which Lachesis has determined the length). When we are able to perceive the Fates as merely the personification of a Latin neuter plural, we have gone a far journey from the days when magic was magic, and not simply a word derived from another plural. *Magic* comes from the Persian; the Greek singular is *magos,* whence the Latin *magus,* plural *magi.* The *Magi* were priests of ancient Medea and Persia, and later practised sorcery. The Magi, in the Bible as we know it, become the "wise men," who, like the Fates, are three in number.

From the conception of Fate and the Fates we derive the conception of the creatures who execute the dictates of Fate. (*Dictates* is another word derived from a term for saying: Latin *dictatio,* 'saying,' based upon *dicere,* 'to say.') A *fairy* is a minor fate; the word, like its poetic doublet *fay,* is one of the Fate-group. Fata Morgana, that renowned figure of the medieval romances, is another. At first the name of Morgan le Fay (i. e., Morgan the fairy or sorceress), it became naturally the name of a mirage that was caused supposedly by her necromancy.

The connection between such terms as *fame, fable,* and *fate*—all of them deriving from the word *fari,* 'to speak'—is obvious. A *fable* (Latin *fabula*) is something told often, now, with the intention of deceiving. *Fame* is common report—what people are saying.

If there are two concepts that the average youth cannot easily associate with one another, they are *glamour* and *grammar.* Yet these are, in origin, the same word. How does it come that so unglamorous a subject as grammar gives us also so ungrammatical a subject as glamour?

First let us note that the word *grammar* itself is related ultimately to the Greek *gramma,* which means a 'letter'—a writ-

ten character. *Graphein,* in Greek, means 'to write'; it is the central term that provides us with such endings as *gram* in telegram, or *graph* in phonograph—with such words as *graphic, graphomania* (a craze for writing), and *graphite* (a carbon that is useful for writing).

Glamour is a Scotch corruption of *grammar.* The interchange of *l* and *r* is one of the commonplaces of speech in many parts of the world. The Chinese *'melican* for *American* points to a national phonetic trait. There is a tendency, also, for duplicated consonants in a word to become differentiated; the technical name for this is *dissimilation*—that is, the making of similar consonants into dissimilar ones. The first *r* of grammar, then, may have been dissimilated into the *l* of glamour.

This would account for the changed pronunciation of the word. We have not yet explained, however, the changed meaning. There is an uncommon English word, *gramarye,* or *gramary,* which comes to us from the French *grammaire* (grammar), in the sense of magic, enchantment, or necromancy (black art). The connection between one and the other is really simple. For, granted that words, whether pronounced or written, have power for evil or good, the term that means the writing down or the ordering of words could easily become a term that means such an inherent power.

It is the more understandable, then, why the notions of grammar and of magic should be so closely associated. The French *grimoire,* which is a cousin-word to our own *gramarye,* means a 'conjuring book.' It means also 'gibberish,' anything unintelligible, and "black art of the law." *Entendre* or *savoir le grimoire* (that is, 'to understand' or 'know one's conjuring book') is equivalent to our "being up to snuff," to understanding the intricacies of the law. This is interesting for its comparison of the law to magic and of both to unintelligible writing and speech. Magical formulas, from the first, were not, and perhaps were not meant to be, any more intelligible than the answers of the Delphian Oracle. And certainly, as the commoner has seen with fine percipiency, the formulary writings

of the legal profession are not always free of inheritances from the days of magic.[2]

In the casting of spells, not only the magical power of the words that compose the formula is of importance; the order of the words must, under severe penalty, be observed. Thus, not only the vocabulary figures, but the syntax, the grammar. The grammar becomes an essential feature of the spell. The precise order of the words is comparable to the precise order of the actions that accompany them. A misplaced word, like a deed out of turn, invalidates the magic, and may even bring down death upon the clumsy officiant.

It is from such formal rigidity as this, indeed, that grammar is supposed to have arisen. The Hindus, for example, were exceedingly careful about the sacred words that they pronounced in reading their sacred writings. They believed, just as did any savage medicine man, that if a word were incorrectly used, or incorrectly pronounced, the object of their religious sacrifices would be frustrated, or even bring about harmful consequences. "This solicitude for the sacred texts," writes Holger Pedersen, "gave the first impulse to the study of grammar, which was subsequently applied to secular literature." [3]

The noun *spell,* employed as a designation of a magic formula, affords additional evidence of the power that is concentrated into words. Its original meaning is that of 'a recital' or 'a tale.' (Gothic, *spill.*) Upon such a basic meaning it was a simple matter to build such derived meanings as 'idle talk' or, in another direction, 'sermon.' (Latin *sermo* means simply 'talk' or 'discussion'; our word *sermon* is a specialized significance.) The verb *spell* (from the Germanic stem *spell-*) meant at first to read letter by letter, as one to whom reading

[2] Greenough and Kittredge, in *Words and Their Ways in English Speech* (The Macmillan Co., 1901), p. 119, observe that the sense of magic, for the English word *grammar,* appears to be a coinage of Bishop Percy's—"a clever coinage, it must be admitted, or a happy blunder, for nothing ever had more the air of a fine old word."

[3] See that excellent work, *Linguistic Science in the Nineteenth Century* (Harvard University Press, 1931), authorized translation from the Danish by John Webster Spargo, p. 14.

was unfamiliar would do. It is easy to imagine that when writing was a new invention, reading came to most persons with a certain difficulty, and that it was, as articulate talking itself must have been in prehistoric times, a laborious process. Talking is still, to many, not at all a smooth and simple activity; reading, to many more, is still a more or less disguised spelling.

From meaning 'to read,' the verb *spell* naturally took on the meaning 'to charm,' or 'bewitch'—i. e., 'to act as a spell.' We speak, in this country, of *spellbinders:* usually political orators who hold or bind their listeners in a spell. Between oratory (the genuine type as well as the spurious) and magic there is a relationship. The orator is as little averse as is the sorcerer to summon up the musical and the magical potency of words.

The original meaning of the noun *spell* is concealed in the term Gospel, which, before it took on the suggestion of *God's spell* was probably *good spell,* which is to say good, or glad, tidings. Since these glad tidings (a phrase that in our more colloquial moments we translate as 'good news') concerned the coming of Christ and the Kingdom of God, the Gospel came to mean the entire doctrine that comprised these elements. From this it came, by a familiar process of language and of thought, to stand for any doctrine. To-day, we might even speak of the gospel of an atheist without suggesting very strongly an incongruous mixture.

One of the numerous definitions of a spell is an *enchantment.* This word, like its associates *incantation* and *charm,* points directly to the use of song in magic. *Charm* is from the Latin *carmen,* which means a 'song'; the *ch* shows that the word comes to us through the French. Doubtless the heroine of Bizet's best-known opera received her name because of the fatal charm that she exercised. *Nomen omen* runs the Latin saw: 'the name is an omen.' This had, however, a deeper significance than appears in translation.

Incantation and *enchantment* are two forms of the same word, each based upon the Latin *cantus,* a 'song' or 'chant.' *Incantation,* in origin, is Latin; *enchantment* comes directly

from the French. Every chant is a song, but not every song is a chant. Into the word *chant* has been sung, by generations of spell-weavers, a haunting connotation of magic, mystery, and religion. A *cantor* is not only a singer; he is the singer in a church, usually the leader of a church choir. Among the Jews, *cantor* is used as a translation of the Hebrew *chazzan;* another translation is *precentor* (Latin *præ-,* 'before,' and *canere,* 'to sing') because the precentor is one who leads in the congregational singing. The French feminine form for singer is *chanteuse,* which is derived from the same Latin words that give us *cantor;* but a *chanteuse* is hardly a female cantor or precentor. Circumstances alter cases—and words.

Song, then, or melody, was one of the inevitable accompaniments of spells. To be enchanted was to be song-bound, just as to be bewitched was to be spell-bound.

Die schönste Jungfrau sitzet
Dort oben wunderbar,
Ihr gold'nes Geschmeide blitzet,
Sie kämmt ihr goldenes Haar.

Sie kämmt es mit goldenem Kamme,
Und singt ein Lied dabei,
Das hat eine wundersame,
Gewaltige Melodei.

It is the eternal enchantress, the Lorelei, whose "powerful melody" so fascinates the boatman that he goes to disaster upon the rocks.

Und das hat mit ihrem Singen
Die Lorelei getan.

See, then, how once more the feminine form of a word takes on a connotation sharply opposed to that of its masculine counterpart. The Lorelei was an enchantress, which is a *chanteuse.* The song of the cantor rises in devotion to the spirit; the song of the enchantress is sung in praise of, or to the ruin of, the flesh. At the core of both meanings, however, is the song, the *cantus* as a source of power, of fascination, of compulsion, of magic.

One more etymology may suffice to reveal how closely asso-

ciated in the minds of our ancestors was the conception of speech with that of craft in magic. The word *rune,* which is much the same in Irish, German, Anglo-Saxon, English, and other tongues, anciently meant 'speech' or 'language.' A more familiar meaning is that of 'secret,' especially with reference to the use of secret formulas for magical purposes.

§ 2. EUPHEMISM AND CACOPHEMISM

If, then, words seem to have the power of materializing that which they stand for; if to pronounce a name is to summon the bearer of that name, or to become possessed of his powers, or to run the danger of exposing oneself to them; if words have "life," then it is reasonable to fight words with words. Some such reasoning must have dictated the custom of changing words, just as names had been changed in order to deceive one's enemies, and one's chief enemy, the Angel of Death.

If the name was an omen (*nomen omen*), to avoid the name was to avert the omen. *Absit nomen, absit omen,* as it were. *Absit omen* was an expression used by the Latins to express the pious wish that no evil omen might attend the use of a word or an expression. It is the equivalent of the equally superstitious expression, "May no evil eye gaze upon our happiness and thus destroy it." The depreciation of one's possessions or of oneself, as is ceremonially practised in China, was doubtless begun by primitive souls who intended thus to avert the envious attention of the gods. The form, like so many other forms, became a formula. When we sign ourselves "Your humble servant," we feel not a jot of humility or servitude. It is simply ceremonial self-depreciation.

In the same way, to call an evil thing good is to invoke the power of words to alter matter and circumstance. To this process has been given the technical name *euphemism,* from the Greek *eu,* 'well,' and *phènai,* 'to speak.' *Euphemizein,* in Greek, is 'to use words of good omen.' All languages are saturated with euphemisms; so deeply, in fact, that often we have to be reminded that we employ them. The obvious term for the

opposite of the euphemism—that is, for calling good things bad, in an effort to avert the envy of the gods, or otherwise to discredit them—is *cacophemism.* (Greek *kakós,* 'bad.')

A classic instance of euphemism occurs in the Greek word for *left,* as distinguished from *right.* The regular words were *laiós* and *skaiós,* akin, respectively, to Latin *lævus* and *scævus.* But as the left was the "worse" side, the Greeks deliberately named it the "better"—that is, *aristerós. (Aristocracy,* the rule of the best element.) After a time, however, even this euphemism wore off, and the left side became *euonumos,* of which the literal translation is 'the good name,' or 'the good omen.' Even the left wing of an army was called *to euonumon,* the side of the good omen or good name. There is nothing indirect or subtle about this euphemism. In so many words it calls the evil thing good, and thus hopes to make it so.

Euphemisms abound on every side, so thickly that we forget they are there. When a shop calls itself a *shoppe* it is employing what might be called orthographical euphemism; the archaic spelling seems to lend dignity or quaintness, as the case may be. When a firm names its wares "Good Luck" products, it is either trading upon the suggestiveness of the words, or is indulging in a private superstition as to their commercial efficacy. When the manufacturer of Pig's Pancreas was advised to change that name to pepsin gum, he yielded to a very sensible suggestion. Even to ourselves we seem more humane when we *liquidate* our enemies instead of killing them; when we place persons in *protective custody* instead of imprisoning them; when we tell an *untruth,* or a *falsehood,* or a *fabrication,* instead of a downright *lie.* A book could be written on the human objection to being called, in plain language, a liar. Yet man habitually lies to others and to himself, and perhaps he is most the liar when, having been called one, he bristles and challenges his accuser to a duel. What he is offering to fight about is not the fact of his truthfulness having been questioned, but the specific word that has been used to describe his aberrancy from the facts. *Lie* and *liar* are "fighting *words.*"

Perhaps one of the most dubious triumphs of the human mind occurred in 1937 and 1938, when Japan was in China, when Italy and Germany were in Spain, when men, women and children were being slaughtered by missiles from ocean, earth and sky, and yet—no *war* was going on. For *war,* in so many words, had not been *declared.* It is to be doubted that the innocent slain appreciate this delicate diplomatic distinction.

The Latin *mens* (mind) gives the verb *mentiri,* which originally meant 'to use the mind.' We have the suggestion in the word *mentation.* It is a commentary upon the uses to which man has put his mind that *mentiri* came to mean 'to lie.' We have that suggestion, too, in our word *mendacious.*

When political factions label each other by such names as *reds* or *economic royalists,* they are using cacophemism. They are "giving the dog a bad name." They are employing, deliberately, names with reservoirs of hostile emotional content. The fox who called the inaccessible grapes sour was using a form of the same technique. The mother who fondly pats her child and addresses it as "monkey" is employing yet another form of cacophemism, with deliberate humorous intent. As euphemism is motivated by fear, so cacophemism of this sort may be but an inverted expression of love.

Between such devices as euphemism and circumlocution there is a psychological relationship. A *circumlocution* is a round-about way of expressing one's meaning. (Latin, *circum,* 'around,' and *loqui,* 'to speak.') It is equivalent, frequently, to what is called "beating about the bush." A circumlocution is thus also a *paraphrase.* (Greek *para,* 'beside,' and *phrázein,* 'to speak'; that is, to say the same thing in other words.)

Every euphemism is, in a sense, a circumlocution, but not every circumlocution is a euphemism. In order to be a true euphemism a word or phrase must call an evil thing by a good name, in the hope of thus transforming the evil into good. Euphemism is based upon superstition, whereas circumlocu-

tion, whatever its origin, is based upon social custom or a desire to escape the commonplace.

Nevertheless circumlocution renders almost as much tribute to the magic in words as does euphemism, and often it conceals the superstitions or fears upon which euphemism is founded. A few years ago there was a topical song with a line, "Let's put out the lights and go to bed." On the radio the last word was changed to "sleep." This was a circumlocution, surely, and not a euphemism. Yet behind that simple change lay a deep and complicated social attitude toward sex, symbolized in the word *bed.* There are many who, even in ordinary conversation, do not use the expression, "go to bed." They "retire"; they "withdraw." To them the word *bed* has become a sexual symbol, to mention which is to call up a train of unmentionable associations.

In the same way the word *leg,* for long, was replaced by *limb;* in German, similarly, *Bein* (our word *bone*) did service for *Schenkel.* As for mentioning the more intimate garments of women, that was out of the question. They were inexpressible and unmentionable. So that, surely enough, they became, in speech, the "inexpressibles" or the "unmentionables." In German the first of these terms was shortened to *die Inex.*

A great variety of circumlocutions (frequently containing overtones of euphemism) clusters about those activities that for one reason or other have been hedged about by taboo. What is it that we most fear? Death and sexual exposure: the end of life and the process by which it comes into being. The digestive process, too, has been invested with taboo, especially its evacuative aspects. In modern times this has become an æsthetic rather than a protective taboo, but it is powerful enough to create many circumlocutions. A long catalogue of circumlocutions has been built up, then, around the functions of the genito-urinary and the gastro-intestinal tracts.

To be sure, we have many seemingly direct phrases and terms for the functions of the body. They turn out to be largely technical terms, derived from the Greek and the Latin and

often as little understandable to the man in the street. The common words for common things, in the digestive and the sexual spheres, are most uncommon in our daily speech and, until recently, were most uncommon in print. They have become, indeed, profane and obscene. Profanity and obscenity, however, deserve attention by themselves, and will repay that special consideration.

The child is early taught to refer to his needs as "number one" and "number two." He never defecates or urinates; he "makes pee-pee," or, better still, "wee-wee." He does his "duty." He makes "attention." Later he will "move his bowels" or "void his bladder." He goes to a "lavatory" (literally, a wash-room) or to the bath-room. Once he went to the water-closet; that humble place quickly became the W.C., a term though used abroad, now all but obsolete in this country. The circumlocutions current among grown-ups are equally evasive, and often touched with humor. We are invited to wash our hands, or, if we wear dresses, to powder our noses. We ask for the "johnny," or, if we are less delicate, for the "can."

It would be beside the point to list, in anything like their entirety, the circumlocutions that have accumulated around the boudoir and the death-bed. Frequently the humor is unintentional, as when pregnancy is described as "an interesting condition." "Delicate condition," at least, was a more honest description. "Expectant," "in the family way," "well along," "wearing her apron high," even suggest the social strata among which the various periphrases originated. "Wearing her apron high" is from a Negro folksong; "in the high months" is a Yiddish description.

The circumlocutions for sexual relations are likewise many. The phrase "sexual intercourse" is the best known of the circumlocutions. Perhaps the most humorous, when you come to think of it, is the legal term "criminal conversation." Yet *conversation,* at first, meant (Latin *conversatio*) "frequent abode in a place." *Talk* is but one of its extended meanings. And "criminal conversation" is to be found in Shakespeare.

Speaking of sexual circumlocutions, I cannot forbear to quote from Dean Trench an example not without its special significance. In his *Select Glossary* he discusses the word *gelding,* which formerly had the meaning 'eunuch.' It is "restrained at present," he writes, "to horses which have ceased to be entire." (!)

It is interesting to observe that in all these cases of circumlocution, the circumlocution represents something that in life, for one reason or another, is concealed. The circumlocution is thus a linguistic form of concealment; to the concealment or withdrawal of real life it adds the concealment of words.

It is quite the same with the many periphrases, in all languages, for the word death. The substitutive, evasive word, as it were, draws a veil over the reality, just as the shroud covers the corpse or, better still, as the flowers cover the body. The circumlocution establishes a psychological distance between us and the reality. Even the humorous circumlocutions, such as "kick the bucket," establish this psychological distance; for laughter is one of the ways in which we deny, or seek to transform, reality.

In speaking of death the circumlocution and the euphemism frequently join voices. A cemetery (Greek, *cœmenterion*) is a 'sleeping place.' When we say that the departed has "gone to his reward"; when we speak of a soul "going to glory"; when the Indian chants of the "happy hunting-ground"; when the Jew describes the cemetery as the "good place," and the after-life as the "true world"; when the present life is described as a "vale of tears" and the life-to-come as a "paradise"—what is all this but calling good a condition that we bend every effort to avoid and to postpone as long as we can? In a sense, is not every paradise a fool's paradise?

It is erroneous to believe only that words *were once* magical. They remain magical, for good as well as for ill. They draw curtains, it is true, against reality; but also they rend veils, which is to say that they *reveal.* By building up fantasies, they

often point the way to achievement. Too frequently they raise a mirage; but it is through words, after all, that we help to cure the ills of words.

Much has been said, and more will and should be said, about the manner in which words, which should be our slaves, have become our masters. The word, we have been cautioned, is not the thing; to mistake one for the other is to fall into the fallacy of magic. This is just true enough to be important; it is equally important, however, to observe that it is not the whole truth about words or about magic. Contemporary writers upon magic and words betray a tendency to emphasize the verbal element at the cost of the psychological. Words, after all, are the tokens of a mentality at work. If, as can so easily be proved, they enslave us, it is because, ultimately, we enslave ourselves.

§ 3. BLASPHEMY—OBSCENITY—PROFANITY

This is true of euphemism and circumlocution. It is just as true of obscenity, profanity, blasphemy, and related verbal interdictions. Wherever we discover a "thou-shalt-not," we discover a fear; wherever we discover a circumlocution or a euphemism or a cacophemism, we discover a fear or an evasion. Not all fears are the result of superstition; certain fears are important to the survival of the human race. We must confront them, nevertheless, and determine whether they belong among the superstitions—the relics of primitive thinking and expression—or among the protections. The fable of the Gorgon taught man that if he gazed upon the Gorgon he would turn to stone. When, at long last, man found the courage to face the Gorgon, it was the Gorgon, not he, who died.

Obscenity, profanity, and blasphemy are concepts that have a direct bearing upon linguistic use. Obscenity refers to the sexual and the digestive vocabulary; profanity and blasphemy refer to the religious vocabulary. All have been vitally affected by the beliefs of the societies in which the concepts

arose; the basic attitudes of those societies are frequently to be discovered in the etymologies of the words. The savage, fearing to pronounce a forbidden word, seeks a word that may suggest it; so, too, the so-called civilized person invents all manner of roundabout phrases for tabooed expressions. He will not say "By God!" but he will say "By golly!" He will not say "Hell!" but he will say "Heck!" He will not say "For Christ's sake!"—a phrase that contains a deep reservoir of emotional power—but he will say, "For cryin' out loud!"

I have heard many an audience roar with laughter at this particular circumlocution. "For cryin' out loud!" represents, like most such circumlocutions, a triumph over taboo. The laughter that greets it is a laughter of contravention—of fooling the police, so to speak, and "getting away with" something —"putting one over on the cops," on the censors, on the law-enforcing element of the community. This is not yet obscenity, which, when successful, is also a defeat of the censors. It is, however, on the borderline. The careless pronunciation of the first four letters in "For cryin' out loud"—and, as I have heard it, such a pronunciation is the rule—sounds suspiciously like the most forbidden word in the language followed by—or, rather, merged with—a word that threatens to sound like "Christ." The phrase is essentially meaningless; the words "out loud" are employed merely to give the color of meaning to the word "cryin'."

I am not asking that this phrase be forbidden. I do not like the habit of mind that forbids. I do, however, indicate that the phrase is in the cheapest taste imaginable, and that one important reason for the cheapness is that it starts out like a good, hearty oath and ends up as a meaningless expression. It is far worse, in my ears, than saying "For Christ's sake!" in loud, unmistakable terms.

It has occurred to very few that there is a "class angle" to obscenity. Yet the existence of this "angle" is obvious; it has become embedded in the history of our words.

That long list of four-letter vocables that nobody uses in public, that one's children are supposed never to learn, and

that everybody uses in private—is a list that is derived from Anglo-Saxon. The longer words for the same things, the words that may be used in public, are derived from the Latin and the Greek. Anglo-Saxon was the language of the commoner; Latin and Greek were the languages of culture, of the upper classes. French, of course, for a long time was the court language of England. The result is that the truly English words for the bodily functions, whether of digestion or of sex, are banished in England, and, naturally, in America, which speaks a dialect of English. On the other hand, there is nothing so disagreeable in the matters of sex or digestion that cannot be said in English—provided you make generous use of Greek and Latin derivatives.

It is not only the "class angle," however, that is to be detected in this state of affairs. A foreign tongue establishes a certain psychological distance between the speaker and the one spoken to; it adds to the formality of the occasion. It is as a veil thrown over the object that otherwise would suffer exposure. Yet even in this case the class angle is to be detected. You and I, humble persons that we are, *walk along the street;* we do not, unless we dress in formal attire, *promenade along the avenue.*

One of the numerous words beginning with *l* and defining what the law proclaims to be a reprehensible interest in sex is *lewd.* Its companions are *lubricous, lascivious, lecherous, libidinous, lustful.* . . . Roll them off on your tongue and you can easily imagine that you're sucking a lollipop. *Lecherous,* in fact, is akin to our word *lick,* and has reference to a gourmand, or, by extension, one who is always interested in satisfying the carnal appetite. However, it is the little word *lewd* that is the subject of my immediate interest. For, within its etymology, it contains the essence of a prejudice against the common people.

Lewd, described originally the laity, the layman, the nonclerical member of society. From this as the central meaning it came to mean ignorant, vile, vulgar, rude, clumsy, wicked, lawless, evil, wretched, useless and—the layman being what he

is—libidinous and lustful. That it should mean also *uneducated* is natural, since in the olden days education and the clergy were virtually (and, as we see from the history of *lewd,* virtuously) synonymous.

The word *lewd,* then, contains a theological bias. It divides us into churchmen and commoners, with the evil lust on the side of the commoner. The word *obscene* is added testimony to that bias. *Obscene,* as nearly as scholars can make out, is derived from two Latin words that mean 'beholding filth.' The idea of filth is central, just as it is in the adjective *smutty.* (German, *Schmutz.*) To associate with filth the process by which we are born, or the pleasurable by-products of that process, is a questionable triumph.

We are civilized, to be sure, but we are still victimized by the magical element of words—the feeling that to name a thing is to materialize it. Consider the history of the word *syphilis* in this country during the past quarter of a century.

The word *profanity* is another term that conceals a bias. A *fane* is a 'temple'; *profane* means 'outside' or 'before the temple,' and hence, 'not sacred,' 'irreverent.' *Blasphemy* is from Greek *blasphemein,* 'to speak ill,' 'to slander.' It is one of the nearer ancestors of our word *blame.* It is a far cry from blaspheming to blaming. Blasphemy itself is more effectively dealt with in connection with the taboo against names, and with the euphemisms invented to avoid pronouncing a holy name outside of its proper context.

§ 4. EUPHEMISM IN THE THEATER—IN SEX—IN THE ASYLUM

When *Othello* was first played in the United States it was not presented as a *play;* such a term, like the word *theater* itself, dwelt in the shadow of iniquity. *Othello* was described for its patrons as a *moral lecture.* So, too, for years, playhouses were described as anything but houses where plays were given. As late as the period of Gilbert and Sullivan the theater was regarded as an annex to the brothel; Thomas German Reed's

theater, where Gilbert first learned the suavities that he was later to develop for the Savoy, was called the Gallery of Illustration. The audience came, supposedly, not to witness a play with music; that would have been wicked. They came to see characters "illustrated" by the actors. The scenes were pictures, therefore the auditorium was a gallery. This euphemism lasted well into the twentieth century; and in the United States the famous old Boston Museum maintained the fiction of an art-gallery to the end; it had canvases on display. Nevertheless, everybody knew that it was a theater, and that here the play was the thing.

Often, then, the rejection of a euphemism indicates the emergence of a new social consciousness, just as the original euphemism indicated the evasion of an unpleasant, but not necessarily an unconquerable, reality. The word *syphilis* is a striking case in point. Originally it was the name of a shepherd in a Latin poem by Fracastoro (1530), and was spelt *Syphilus*. It is conjectured that the name is derived from Greek *sys,* 'a hog,' and *philos,* 'dear' or 'loving.' It indicates a serious venereal disease. Perhaps, for the sake of preciseness, I should have said "sexual" disease. For *venereal,* that is, relating to Venus, is itself euphemistic. As the name of a sexual scourge, *syphilis* was doubly a candidate for euphemistic treatment. (The more specifically medical term is *lues,* which may refer to any pestilential disease. It is associated with the *lu* element in our word *pollute.*)

The euphemism for *syphilis* became, by an effort of gentility, "the social disease." This has lasted into our own day. A campaign of social education, however, has led to curious results—to the downfall, in fact, of a euphemism together with the downfall of the taboo that was interfering with the eradication of a scourge.

How difficult it is for even the more enlightened members of the community to rid themselves of ancient taboos is well illustrated in a book devoted to *A Plea for Monogamy,* by Dr. Wilfred Lay. Dr. Lay advocates, as an educational measure, discreet parental nudity before children. "Many chil-

dren," he writes, "never see their parents *in puris naturalibus,* though there is no logical or psychological reason why they should not, and many psychological reasons why they should have experiences that would prevent them, boys as well as girls, from the shock of some later revelation."

Consider the amusing psychology—and language—of that quotation. How are the parents going to put such discretion into practice if the very man who counsels it takes refuge, at the crucial moment of his thesis, in the draperies of Latin? How are the parents to learn courage from a counselor who, in the very act of advocating bodily nakedness, shows that he fears verbal nakedness? Are we after the naked truth, or after Truth *in puris naturalibus?*

The power of taboo is even more strangely and fearfully shown in the autobiography of Frank Harris, wherein he sets down almost every forbidden word in the language. But what are the words that he cannot get himself to write out in full, this advocate of uncensored living and writing? *Damn* and *hell!* These he writes, consistently, *d—n* and *h—l,* like any Gilbertian captain on the deck of the good ship *H.M.S. Pinafore* singing that he has never spoken a "big, big D——!"

In one of the most progressive of our states, the terminology of mental affliction has changed in accordance not only with euphemism but with a more enlightened attitude toward insanity. *Insanity* itself means unsoundness; it has become specialized to indicate only a certain kind of unsoundness. There is no inherent reason why it should indicate only unsoundness of mind, or why *sanity* should indicate soundness of mind. Latin *sanus* refers to health; a *sanitarium* is a retreat or a station dedicated to health; *sanitation* is the science of hygiene.

Originally the committee that watched over the mental health of the state was known as the Board of Lunacy. *Lunacy* is a word that contains evidence of an outmoded theory of mental illness. *Luna* is Latin for 'moon,' and a *lunatic* was supposed to have been "moonstruck." To-day, the word *lunatic* has lost caste; it is not a part of the scientific or the medical

vocabulary. In the same way, such a term as Lunatic Asylum seems somehow rustic to a sensitive contemporary. *Asylum* itself, in this connection, was a euphemism; it is derived from the Greek *ásulon,* which meant originally 'inviolable,' that is, exempt from spoliation or seizure. An aslyum, then, was a sanctuary, to which criminals and debtors might repair and find protection from their persecutors. The present meaning, though easily understood, is the last of its numerous differentiations.

From the board that governed a Lunatic Asylum to such a designation as the State Board of Insanity is a step that is more important than it sounds. The conception of insanity, as opposed to lunacy, reveals a widening and deepening of understanding, and, what is quite as significant, human sympathy. It was a mark of progress when we ceased referring to the mentally ill as *lunatics* and began to call them *insane.* It was another mark of progress when the State Board of Insanity had its name changed to Commission of Mental Diseases. For, since words are not stable in their meanings and connotations, *insane* soon began to acquire certain overtones that had sounded from *lunacy. Mental disease,* moreover, has a more scientific ring than has *insanity.* It carries far less of the unpleasant connotation that adheres to *insanity.*

Observe the name now suggested for the same group: Commission of Mental Health. This is, in certain respects, a euphemism, but it helps to emphasize a valuable consideration: that not all euphemism is a cowardly turning-away from reality, nor a weak attempt to deceive oneself with word-jugglery. There is nothing to be gained, for example, by naming an institution a Home for Incurables. The psychological effect upon the inmates or the visitors is bad, and it is conceivable that the life of an incurable may be shortened by telling him brutally the truth about his condition. Ibsen, in his self-satire *The Wild Duck,* has shown the harm that may be wrought by indiscriminate truth-telling. Popular wisdom discriminates between white lies and black, even as the Church distinguishes between white magic and black. Naming a board

a Commission of Mental Health places the emphasis upon the determination to cure, rather than upon the supine acceptance of the ailment. This is the more significant since insane persons are not the inevitably incurable demons that an uninstructed public once thought them to be.

Euphemism, then, is not altogether a sign of failure to make a salutary adjustment to reality, any more than "escape" literature is unmistakably a token of inability to cope with reality. Certainly, in the beginning, euphemism represents a verbal escape, and pays tribute to a primitive belief in the power of words over fact. If, however, it appears that certain words may—for a time, at least—designate certain things without arousing an unpleasant train of associations that would be stirred up by another word or expression for the same things, we follow a natural, self-protective instinct in making use of such words. Thus, in a metaphorical sense, it appears that words do possess "magic" after all. They may, when skilfully employed, silence certain associations and summon others. Such a skill is used for evil and for good, as are all things that come to the mind and hand of man.

§ 5. SOME SOCIAL EUPHEMISMS

Colored is a euphemism for Negro; *Hebrew* is a euphemism for Jew; *Scientist* is a euphemism, or a circumlocution with euphemistic overtones, for Christian Scientist.

The words for racial coloration are, like all else in language, approximative only. The yellow race is not, strictly speaking, yellow; nor is the Indian red; nor is the Caucasian white; nor is the Negro black, which is what Negro means. The unscientific racial spectrum, however, has little to do with the euphemism inherent in *colored* as applied to the Negro. The use of *colored* is (both as euphemism and as circumlocution) based upon the desire to avoid the term *Negro*. The Negro himself often employs euphemisms for the term, just as does the Jew, and for similar reasons. The words *Negro* and *Jew* have become, through historical circumstance,

freighted with overtones of prejudice and misunderstanding. There are Jews who have become so sensitive that the very sound of the word *Jew,* as made by a Gentile, rings unjustly in their ears with an unpleasant tone. There are other Jews who—again resembling, psychologically, the troubled Negro—try to "pass," which is the Negro term for being taken as a white. To such Jews, intent upon being accepted virtually as Gentiles, any word indicative of Semitic origin is unwelcome. Between the avowed Jew and the Jew who would conceal his origin is a stratum of Jews who would not think of denying their origin, but who, nevertheless, dislike the word *Jew* because of its unpleasant associations. To such Jews the adjective and noun *Hebrew* seem to possess greater dignity than *Jew.*

With the psychological and economic implications of these euphemisms I am concerned only in so far as they explain the linguistic usage. There is a real difference between the terms *Yiddish, Jewish* and *Hebrew.* It is useful, and at times necessary, to draw between them a sharp distinction. *Yiddish* refers to the language developed from Middle High German, and to the people who speak it. *Hebrew* refers to the Semitic tongue of Biblical days, of which a contemporary form is spoken in Palestine to-day. *Jewish* includes any activity of the Jews. A Jew may speak, as his daily tongue, Yiddish; he may recite his prayers in Hebrew; he may have interests that overflow the banks of either speech. Many of his Jewish interests may be carried on in English, or whatever is the tongue of the country in which he dwells. There are Jews who are Hebrews; there are also Jews who are Hebrews only by courtesy of language. The description *Hebrew,* then, appears often as a designation intended to soften the impact of the word *Jew.*

I recall a long conversation on music with one of the greatest singers the Negroes have produced—a gentleman of unassertive nobility to whom his music has been a means of delicately implying the dignity of his people. Not once did he use the word *Jew* or the word *Negro;* it was always "your group" and

"my group." This, too, was euphemism with overtones of circumlocution.

Nigger, of course, is a variant of *Negro,* just as *Yid* is slang for *Jew,* founded probably upon the adjective or the noun *Yiddish. Yid* has a derogatory implication, more objectionable than *Jew.* Many Jews who would not object at all to being called *Jew* would bridle, and perhaps justly, at *Yid.* To those of Russian origin, especially, with the sound *Zhid* ringing in their ears and the memory of pogroms in their hearts, it would possess a sinister suggestion.

As for the word *Scientist* used for *Christian Scientist,* there is a valid objection to it because of the easy confusion with the same word used in an entirely different sense. In writing or printing, where it is a simple matter to capitalize the S, the objection is less valid on these grounds. In speaking, for that matter, the context shows generally what is meant. Yet there are other objections, from the purely semantic point of view. There is, for example, a Jewish Science as well as a Christian; should adherents to this faith take to using *Scientist* as an abbreviated form for Jewish Scientist, confusion would be worse confounded. The word *scientist,* as used by itself, has come to have a definite connotation; that connotation is not a religious connotation. This is not to say that scientists are irreligious; certain eminent scientists, indeed, arise at once to refute such an interpretation. At the root of the word *scientist* however, is a reference to a way of looking at the data of existence; that way is not the way or the mood of religion, and to use the word *scientist* to refer not to the procedure of the laboratory but rather to the religious attitude is to invert long-established linguistic usage. It is virtually, though not necessarily in conscious manner, to claim for a faith the support of laboratory proof.

This is not good religion; it is not good language. It is not either of these things because the term *scientist* does not, as used in the new manner, point to a clear meaning, whereas in its established sense it is itself scientifically clear.

One's name seems peculiarly a part of oneself. It is not strange that names, in the evolution of human thought and action, should have become specially subject to linguistic superstition.

CHAPTER VII

"A LOCAL HABITATION AND A NAME"

> . . . the very name of Jesus was of so sweet a taste in her mouth [that is, in the mouth of the Venerable Sister Serafia] that on uttering it she frequently swooned away and was therefore obliged to deprive herself of this joy in the presence of others till she was given sufficient robustness of spirit to repress these external movements. NORMAN DOUGLAS, in *Siren Land.*

§ 1. PERSONAL NAMES

IN THE SPEECH OF THESEUS THAT OPENS THE FIFTH ACT OF *A Midsummer-Night's Dream,* there is a famous passage that has, whether or not Shakespeare intended it to have, a pertinency to the beginnings of language and even of mythology.

> *The poet's eye, in a fine frenzy rolling,*
> *Doth glance from heaven to earth, from earth to heaven;*
> *And as imagination bodies forth*
> *The forms of things unknown, the poet's pen*
> *Turns them to shapes and gives to airy nothing*
> *A local habitation and a name.*
> *Such tricks hath strong imagination,*
> *That, if it would but apprehend some joy,*
> *It comprehends some bringer of that joy . . .*

The natural ease with which we personify—that is, express ourselves by impressing ourselves upon our speech-material—appears very strikingly in our constant use of the word *Nature.* In language, as in other respects, man is at once, in the Spinozan phrases, *natura naturans* and *natura naturata*—'nature as the creator,' and 'nature as that which is created'—the active and the passive principles of life. Etymologically, *Nature* means birth; it is thus related to such words as *native, nation.*

We are forever ascribing life, and therefore meaning and purpose, to Nature.

The bridge between consciously figurative speech and speech in which personifications are resurrected into life is, in colloquial talk, easily spanned. This is true not only of the unscientific layman, but of scientists preëminent in their special fields. See by what subtle gradations a Sir James Jeans may evolve, from a universe seemingly guided by a mathematical principle, a Creator who is a Cosmic Mathematician. Nor was he the first, by many years. See how easily the student of evolution, taking the suggestion from Darwin himself, falls into the habit of speaking about *natural selection* as if Nature watched over her mutations, selecting this one and rejecting that. The Lamarckian modification of Darwinism, indeed, transforms such selection into a conscious, willed alteration on the part of the individual.

This, as the reasoning seems to run, is how the phenomenon works out; therefore somebody (Nature) has worked it out. The perfect *reductio ad absurdum* of this Nature fallacy is reached by the French historian Michelet. Freud quotes him, in *Wit and the Unconscious,*[1] as remarking, in *The Woman,* "How beautifully everything is arranged by nature. As soon as the child comes into the world it finds a mother who is ready to care for it."(!)

This is as funny as the *mot* quoted by Guérard about the French entomologist Henri Fabre. The praying mantis devours her mate in the very act of union. "This," exclaims the authority upon insects, "is an abominable custom!" [2]

The fallacy is not merely a linguistic one; it is, of course, a psychological complication. Substitute, in this connection, the word *god* or *gods* for the word *Nature,* and you get a hint —a hint only—of the rôle that words have played in the origins of mythology and religion. For myth is often *ex-post-facto* etymology; so, too, are heroes often *eponymous*—that is, invented to explain the word or the name that suggests them.

[1] See page 78 of the English translation.
[2] *Art for Art's Sake,* p. 188.

We ask, almost instinctively, for names and as instinctively bestow them. One of the first things we are taught is our own name; long before it becomes a matter of pride or honor, it is a utilitarian label.

Names, which to-day are chiefly labels, once had a significance of which both bearer and bestower were deeply conscious. According to the Bible, hardly had the Lord God completed the creation of the universe when He paraded before Adam the hosts of the brute world. These He brought before Adam "to see what he would call them: and whatsoever Adam called every living creature, that was the name thereof. And Adam gave names to all cattle, and to the fowl of the air and to every beast of the field."

It was the first inventory. Later, Adam, awaking from the sleep during which woman had been fashioned from his rib, felt immediately the need of naming her, and did so in full consciousness of his philological rôle. "This is now bone of my bones, and flesh of my flesh: She shall be called Woman, because she was taken out of Man." We are not occupied with the correctness of Adam's linguistics. Philology as a science is relatively new, dating from the first quarter of the last century. Moreover, the English Bible is a translation from the Hebrew, and from a Greek version of the original text. Adam, of course, could not have used English; nor does *woman,* whether in English or in Hebrew, mean "taken out of man." It is unsafe to judge from translations, as that author discovered who, having written a book on Jesus that achieved a nationwide circulation, praised in it the choice of short words by the Christ. Jesus, in his parables, spoke a dialect that was rather poor in short words; those words belonged to the translators of the New Testament into English.

What we are interested in now is the need—and it is felt throughout the Book of Genesis—for naming man and beast, and often for explaining the choice of the name.

Adam itself is Hebrew for 'red,' and is akin to the Hebrew for 'blood.' Strangely, we receive no commentary in Genesis upon the name of the first man. When Adam raises his mate

from the status of anonymous womanhood and names her *Eve,* it is "because she was the mother of all living." *Eve,* in its original form, means 'life'; the name is akin to the Hebrew *l'khayyim,* 'to Life!', which is the regular salutation exchanged at drinks, corresponding to "Your health!", "Prosit!", "Skoal!" or "Gesundheit!" *Prosit* is Latin for 'may it do you good!' *Skoal* is Scandinavian for 'bowl,' hence the toast that is drunk out of it. *Gesundheit* is German for 'health.' In the Italian phrase, *alla vostra,* the essential word for *health* is left out; the complete expression should be *alla vostra salute,* 'to your health.'

When God changes the name of Abram to Abraham, He explains: "for a father of many nations have I made thee." *Abram* means 'exalted father'; *Abraham,* 'father of a multitude.' "As for Sarai thy wife," adds the Lord, "thou shalt not call her Sarai, but Sarah shall her name be." The change is not explained in the text; *Sarai* means 'contentious,' 'quarrelsome,' whereas *Sarah* signifies a 'princess.' Sarai, then, was raised in honor even as was Abram. Her contentiousness may well have been caused by her barrenness; now, rendered fertile, she stands beside the father of multitudes.

So, too, when the Lord "saw that Leah was hated, he opened her womb. . . . And Leah conceived." Four sons she bore, and named the first Reuben. "For she said, 'Surely the Lord hath looked down upon my affliction; now therefore my husband will love me.' " *Reuben* means 'Behold, a son!' Her other sons she named *Simeon* (famous), *Levi* (adhesion) and *Judah* (praise).

Names may embody destiny. Recall the dramatic moment in the New Testament (Matthew, xvi, 17, 18) when Jesus addresses Simon:

"Blessed art thou, Simon Barjona: for flesh and blood hath not revealed it unto thee, but my Father which is in heaven.

"And I say also unto thee, That thou art Peter, and upon this rock I will build my church; and the gates of hell shall not prevail against it."

The second verse contains a sober pun, for *Peter* is derived

from the Greek for stone or rock. *Simon* is a shortened form of Simeon.

There was little need for the Hebrews or the Greeks, in their literature, to offer translations of names unless the names bore a special significance. To us, who have all but lost the feeling for the inner meaning of names, and who rarely pause to ask what our own names may mean, such translation sometimes becomes necessary.

The Greeks, for example, were, like other more primitive peoples, highly conscious of the meanings of their names. When they bestowed such descriptions as *Kleomenes* and *Thucydides* and *Megacles,* it was because there was a superstitious support in calling a man 'glorious spirit,' 'to the divine glory,' 'to great glory,' which is what, respectively, these three names mean—and invoke. So *Nikephoros* means 'bearer of victory,' *Demosthenes,* 'power of the people,' *Polycrates,* 'to great power,' and *Alexander,* 'protector of men.' The superstitious element in the names is a matter for later consideration; what is important now is that names are words no different from any others.

When John Bunyan wrote his vision of *The Pilgrim's Progress,* he might easily have named his characters after Hebrew or Greek prototypes. So, for that matter, might the Puritans have used Hebrew names in their Biblical forms, instead of translating them into English, often with an effect that posterity finds unintentionally humorous. Fighting sin and glorifying the Lord are noble occupations, but who, to-day, could persevere with a name such as Kill-Sin Pimple, or Praise-God Barebones?

Bunyan, out of a psychological directness and simplicity that irradiate his prose, named his characters with all the plainness of a morality play. The names and their meanings are one and unmistakable: Christian, Faithful, Evangelist, Obstinate, Pliable, Worldly Wiseman, Facing-Both-Ways, Fair-Speech, Two-Tongues. One of the few foreign names in the dream is Apollyon, the monster who bestrides the road before the advancing pilgrim. *Apollyon* is Greek for the Hebrew *Abaddon,* and

signifies 'Destruction,' which is also the name of the city that Christian has abandoned for the good life. The name of Bunyan's places are as direct as are those of his people. They have enriched our language with many a phrase that we take for granted, without being aware of the visionary tinker who gave to these dream-places a local habitation and a name: the House Beautiful, Vanity Fair, the Slough of Despond.

To-day such a method of naming people or places would seem obvious—too much like appending a diagram to a joke. It belongs, least offensively, to travesty; we think of such characters as Gilbert's Dick Deadeye, or Shaw's General Spitsneezeandkoff, or that masterly creation of George S. Kaufman and Morrie Ryskind, Vice-President Alexander Throttlebottom, from *Of Thee I Sing*. A rose by any other name would smell as sweet, but might not sound so sweet; and sound, with names, is sometimes more important than sense. The sound, indeed, through its associations, may suggest meanings quite independent of the sense.

How true this is appears from the to-do about naming children yet unborn. It is as if the name itself may possess some magic power that will follow the child through life. The association between names and magic is ancient.

The last three lines of the quotation from the speech of Theseus have been overlooked in favor of what precedes them. To me they have always been as important as the more familiar portion. Imagination not only comprehends "some bringer of that joy." It names the bringer; it personalizes the messenger. It is not only the bringer of joy that is personified. We tend, even as civilized beings, to personify—to create in our own image—much of our experience. Even a philosopher who has nearly tripped upon a banana peel may turn upon the inanimate object and kick it off the sidewalk with all the anger of a child punishing a kitten that scratches.

Of this mental habit were born Mythology and its pale descendant Allegory. Words can actually give shape and sound to nonexistence. This is not the least of their miraculous—and dangerous—powers.

To return to our children; we name them as much for sound as for sense; sound, too, has a sense all its own. Names—whether of people, or of places, or of the days of the week, or of the months of the year—have by unending repetition lost their original meaning and have become labels.

§ 2. CALENDARS

The names by which we know the days of the week, or the months of the year, involve us at once in a number of mythologies that we have but imperfectly abandoned. *Sunday* relates to the worship of the sun, as *Monday* relates to the worship of the moon. *Tuesday* is Tiw's day, the day named after the Teutonic god of war, as *Wednesday* is the day of Woden, who corresponds in the Teutonic mythology to Mercury in the Latin. *Thursday* is the day of Thor, god of thunder; *Friday* is the day of Frig, wife of Woden. *Saturday* is Saturn's day.

This, however, is but *our* way of naming the days of the week. In Russian, for example, the name for Sunday (*vosskressenye*) is associated with the idea of resurrection. Monday (*ponedyelnik*) means simply 'the beginning of the week.' Wednesday (*sreda*) means 'middle,' just as the German *Mittwoch* (Wednesday) means 'mid-week.' Tuesday, Thursday and Friday are, in Russian, words signifying 'second,' 'fourth' and 'fifth day,' respectively. Saturday is *subbota,* or 'Sabbath.'

In Spanish and French, Sunday is dedicated, not to the sun, not to the resurrection, but to the Lord (Latin, *Dominici dies* 'the Lord's day'; *domingo* and *dimanche,* respectively). Monday is, to be sure, the day of the moon: *lunes* and *lundi,* respectively, for Spanish and French. Tuesday, too, is devoted to a god of war, but this time the Roman god Mars: *martes, mardi.* Wednesday is still Mercury's day: *miércoles, mercredi.* Thursday is devoted to Jove: *jueves, jeudi*—the same Jove who is akin to Tiw, who named our Tuesday. Friday, as in our own tongue, is named after a goddess, but this goddess is Venus: *viernes, vendredi.* Saturday, as in Russian, is the Sabbath: *sábado, samedi.*

That we should name days after saints and gods and goddesses tells us something, at once, about our beliefs; that, in English those gods and goddesses should represent both the Teutonic and the Græco-Roman deities tells us, again, something about the strains that have contributed to our civilization, just as the word Sabbath, which may mean either Saturday or Sunday, indicates yet another source, the Hebrew. Indeed, the fact that Sabbath may refer to either Saturday or Sunday indicates an important rift in our civilization. For that matter, to a Mohammedan—and here another rift is indicated —Sabbath stands for Friday.

The names of the months are imbedded with similar data.

What should *January* have to do with a door? *Janua* is Latin for a door or a gate; Janus was the god of gates and doors, and hence of all beginnings. January, as the month of Janus, might be looked upon as the door to the year. It was not always the first month, however. A door has two sides; hence Janus is represented with two faces. He was the god of the sun and the year, for between year and sun there is a direct mathematical relation; the chief definition of year is the time required by the earth to make its revolution around the sun.

Mr. Facing-Both-Ways, whom we met in *The Pilgrim's Progress,* might thus be a brother to Janus, who, in addition to all his other attributes, quite naturally may become a symbol of hypocrisy. Was it altogether an accident that Shakespeare, in the first act of *Othello,* made Iago swear by Janus? What could be more appropriate than for such an arch-hypocrite as Iago to invoke a two-faced god?

Yet it should be remembered that the two faces of Janus did not necessarily mean, to the ancient Italians, hypocrisy. And has not Emerson written, "A friend is Janus-faced; he looks to the past and the future"? Two-faced, in popular usage, easily becomes double-faced. Double-faced easily becomes *hypocritical,* especially when we remember that *hypocrite* comes from the Greek for an actor, i. e., one who plays a rôle.

We began with the first month of the year; it has taken us through doors, mythologies, double-dealing—double-dealing

on the part of words themselves, in fact, which can face two ways, and more than two!

February is associated with expiation, purification, and, more prosaically, cleansing. The *februa* was a feast of expiation.

Mars is the only deity who rejoices in a month of the year as well as a day of the week. *March* is his month, as Tuesday, in its French, Spanish, and Italian forms (*mardi, martes, martedì*) is his day.

April is associated with newness; it is the month of the first vegetation. *Aprire* in Latin is 'to open,' and *Aprilis,* the name of the month in Latin, suggests the opening of spring. An "April gentleman" is a newly wed, though he is not necessarily an April fool.

May is derived from Maius, and may be akin to Maia, a goddess, daughter of Atlas and mother of Mercury.

June pays homage to Junius, the name of a Roman tribe.

July pays homage to Caius Julius Cæsar. The earlier name of this month was Quintilus, which meant simply 'the fifth month,' just as *piatnitza,* in Russia, means 'the fifth day,' which we call Friday. Originally, the Roman year began in March, so that July would be fifth in order.

So, too, the earlier name of August was *Sextilis,* or 'sixth month.' The name that we inherit comes from that of Augustus Cæsar.

The rest of the months lack interest from the verbal standpoint, consisting simply of numeration: September, October, November and December are, respectively, for the seventh, eighth, ninth, and tenth months, reckoned from March as the first month.

When the French revolutionists reformed, together with their society, their calendar, they renamed the months according to a most logical system. The republic having begun on September 22, 1792, the New Year began on the same date, by decree of the National Convention, in 1793. It was in effect only twelve years, being abolished in 1805. The renaming of the months, however, reminds us not only that the calendar

has been changed more than once, but that there is nothing inherently eternal in even the most sacred words. It gives us a feeling, too, of language being created—if but abortively in this case—almost under our eyes, just as, in our own day, it is being created in our very ears.

Consider the months of the French revolutionary calendar:

Vendimiaire	(Vintage)	beginning on	September 22
Brumaire	(Fog)	" "	October 22
Frimaire	(Sleet)	" "	November 21
Nivose	(Snow)	" "	December 21
Pluviose	(Rain)	" "	January 20
Ventose	(Wind)	" "	February 19
Germinal	(Seed)	" "	March 21
Floreal	(Blossom)	" "	April 20
Prairial	(Pasture)	" "	May 20
Messidor	(Harvest)	" "	June 19
Thermidor (*Fervidor*)	(Heat)	" "	July 19
Fructidor	(Fruit)	" "	August 18

There is an appealing nationality to these names that is joined to an equally appealing poetry. Naming the months after their characteristic weather, or after the characteristic activities of the man of the soil during the weather of the respective months, was a tribute at once to the beneficence of nature and to the common toiler in whose interests the Revolution had ostensibly been planned. As a system of names the French revolutionary calendar is superior to the ones that the Western world—including France—uses to-day. It is consistent, even beautiful. Beauty and consistency, however, avail little against the inertia of long usage and convenience.

§ 3. PERSONS AND NAMES INTO WORDS

Names, originally, were words denoting things, acts, or qualities; it is not strange, then, that they tend so often to revert to their first condition. Epicurus was a Greek philosopher; he taught, it is true, that pleasure is the only good, but his conception of the highest happiness was to diminish the number of man's desires. His name thus became suggestive

of refined voluptuousness in the matter of food and drink. A person of such fastidiousness, from being called an Epicurus, was slowly transformed into an *epicure*. In Yiddish an *Apikeiros* (derived from the same source that gives us *epicure*) is a free-thinker. For Epicurus was not only a hedonist (Greek *hedonia,* 'happiness') but a believer in the atomistic theory of Democritus, the "laughing philosopher" who provided the basis of the evolutionary theories of Lucretius. Epicurus was thus the type of disbeliever. The Gentiles made of his name a symbol of the body; the Jews made of his name a symbol of the spirit, even if but a negative symbol.

If elderly rakes are called Lotharios, it is because of a character in Rowe's drama *The Fair Penitent,* in which one so named seduces Calista. If the word rarely occurs without the adjective "gay" preceding it, it is because of the line from that play:

Is this that haughty, gallant, gay Lothario?

In the same way, another type of rake is called a Don Juan. A disciplinarian is called a *martinet* because of a drill-system that was devised by a M. Martinet, under Louis XIV. We speak of "a Roland for an Oliver"—that is, of returning for a blow received a blow of equal strength—because Roland and Oliver, in the tales that grew up around the story of Charlemagne, were two knights who were evenly matched in heroic combat. A Roland for an Oliver means 'tit for tat'; and tit for tat is merely another way of saying 'this for that.' Guides are notoriously talkative; because Cicero was a great orator, the Italians, at first humorously no doubt, named their guides *ciceroni,* or Ciceros. Hence the word *cicerone,* or Cicero, for guide. Epicurus a sign over a restaurant, and Cicero a loquacious barker! The etymological lot of the great Cæsar was happier. For Cæsar gave to more than one country in Europe its name for the ruling sovereign: in Russia, *Czar;* in Germany, *Kaiser.* So Charlemagne (the great Charles; in Latin, Charles is *Carolus*) gave to Russia and other nations their word for king: *Karól.* Because Julius Cæsar was supposed to

have been taken from the womb by cutting through the walls of the abdomen and the uterus, such an operation to-day is called a Cæsarian section. (Latin, *secare,* 'to cut'; *sectio,* 'cutting.' The German for 'section' is *Abschnitt,* from *abschneiden,* 'to cut off.')

The possibilities for the formation of such words are as many, indeed, as the names of persons who acquire fame or notoriety for one reason or another. Such terms as *volt* and *ampere* and *watt* in the vocabulary of electricity pay tribute to men whose gifts advanced the control of this mysterious power. Botany is densely populated with genera that once were men: *forsythia,* named after William Forsyth, who brought the shrub from China; *fuchsia,* named after the German, Leonhard Fuchs; *freesia,* commemorating the Swedish botanist, Elias Magnus Fries. Of words that are derived from names alone a large dictionary could be compiled. What is more important than the particular name that provides the etymon for a particular word is the process. We make words of whatever comes to hand, or eye, or to ear. Once the word has been made, and has passed because of irreplaceable usefulness into the vocabulary, its origin is all but forgotten and its best warrant becomes its utility.

Nor is this to be looked upon as a process that belongs to the linguistic past. Words are coined almost daily from the names of persons. A hundred years ago we named a waterproof garment a mackintosh, after its inventor, Charles Mackintosh; after Lord Raglan we named a different type of overcoat. In our own time we have named a style of woman's hairdress after the coiffeur who introduced it: the Marcel wave. Marcel has become not only an adjective, but a noun (a *marcel*), and a verb (*to marcel*). Names have become even interjections: *Great Scott! Holy Moses! Jumping Jehosophat! The Dickens!* The word *dickens,* by the way, although it probably comes from a name, is not the name of Charles Dickens, the Victorian novelist. It is to be found in Shakespeare; it is to be found in *The Beggar's Opera.* It is used as a euphemism for the devil or the deuce.

We speak of our fountain pens as *Watermans* or *Parkers;* we call our automobiles our *Packards* or our *Fords.* From such a conscious etymological association to one that is completely unaware of the source of a word, it is but a historical step. The story of such a word as *victrola* represents a transitional stage. *Victrola* is a word coined by the Victor Phonograph Company to designate their special types of talking-machines. *Frigidaire* is likewise a proprietary word. So popular did these types become that the public took to calling any type of talking-machine a *victrola,* and any type of refrigerator a *frigidaire.* A word that has had even greater fortune is *vaseline,* which remains to this day a trademark. The manufacturer of the article gives as its origin the German *Wasser,* 'water,' and the Greek *élaion,* 'olive oil.' The word is as smooth as the product that it designates; it fairly glided into the language, and few indeed are aware that it is as patently a manufactured product as is the article that it names.

Isms and names exhibit a natural associative affinity. The suffix *-ism,* as is to be seen in the first word of this paragraph, readily became a noun. It is Greek; it forms nouns that corresponds to verbs in *-ize,* another suffix that signifies to cause or to make. *To idolize,* for example, is 'to make into an idol'; *to hypnotize* is to 'cause to sleep.' (Greek *hypnos,* 'sleep.') The suffix *-ism,* then, would indicate action, process, state, doctrine, or distinguishing characteristic. *Darwinism, Marxism, Catholicism, Protestantism, Judaism*—these offer a few examples of terms that are manufactured almost at will.

Everything is grist that comes to the mill of language. About the making of a person's name into an ordinary word there is nothing strange or irregular. It is part of the process followed in all word-creation, or, if you prefer the term, word-manufacture. That names of persons should become nouns is far less novel than it appears; for the word *name* and the word *noun* are, historically, the same. The first, more directly, comes to us from the Germanic tongues (Anglo-Saxon *nama,* German *Name*); the second, from the French *nom,* which in turn is derived from the Latin *nomen.* A name, then, is simply a

specialized noun. Sometimes we read, or hear it loosely said, that many words come from names. But all names are words, and they are none the less words for being applied to creatures that can move and talk and give names in turn.

One philologist maintains, indeed, that the first words were designations of human beings—that they were not so much what we call names as what we call pronouns. "In our opinion," writes Bréal,[3] "the first word to stand out from all others was the pronoun. I believe that this category is more primitive even than that of the noun, because it requires less inventiveness, because it is more instinctive, and more easily commentated upon by gesture. We should not, therefore, allow ourselves to be deceived by the term 'pronoun' (*pro nomine,* 'instead of a noun') which comes to us from the Latins, who, in turn, themselves translated it from the Greek (*antonumia*). The error has lasted into our own days. Pronouns are, on the contrary, in my belief the most ancient part of language. How could our *me* ever have lacked for an expression with which to indicate itself?"

Pronouns, says Bréal, are the most mobile elements in language; they are never definitely attached to a single person, but are forever on the go. "There are as many *me's* as there are individuals who speak; there are as many *you's* as persons to whom I may speak. There are as many *he's* (better still, *it's*) as there are real or imaginary objects in the world. The reason for this mobility is the fact that these pronouns contain no descriptive element. Thus a language composed only of pronouns would resemble the babbling of a child or the gesticulation of a deaf mute. The need of another element, out of which were formed the noun, the adjective, and the verb, was therefore evident. But it is none the less true that the pronoun takes its place as the foundation and the origin of languages: it was without doubt with the pronoun . . . that the differentiation into grammatical categories began."

There is a certain logic to this. Man, as the measure of all things, awaking to the world, might naturally be imagined as

[3] Michel Bréal, *Essai de sémantique,* pp. 206–208.

eventually dividing it into self and not-self. It is a question that must be settled, however, by the psychologists. If linguistic research could prove what Bréal maintains, it would add weight to such a psychological view. Were the first words pronouns or adjectives? That is, were they designations of self or crude descriptions of the outside world, out of which, gradually, nouns and other parts of speech evolved?

In a negative way, studies in the evolution of grammar may come to our assistance. It seems to be a question, however, whether we became (or, as infants, become) conscious first of ourselves or of the rest of our environment—whether the *I* or the *it* arrives earlier in the course of our gradual achievement of the feeling that we are distinct from the rest of creation. As thus stated, it looks like a question for the philosophers as well as for the psychologists. In any case, it stands on the outer frontier of linguistic investigation.

It may be indicative that, as pronouns are supposed to be made out of nouns, they may almost as easily be made *into* nouns. There is nothing strange about saying "my *ego*" or "your *ego*." *Ego* is Greek and Latin for 'I.' To be able to say "my *I*" is not only a triumph of grammar but of understanding. It could not have been done in the early stages of mankind, for it connotes a certain depth of self-understanding, and a certain ability to consider oneself not only subjectively but objectively.

As for the phrase "your *ego*," the word *ego* has undergone a transformation through which, from meaning 'I,' it has come to mean anyone's 'I'—that is, anyone's self. Just as anyone's name may become an ordinary noun, standing for something inanimate, so may the very word for the speaker, as referring only to himself, become a word for the one spoken to.

What else is involved in the process by which the name of a person becomes a word standing for that which makes the person prominent in the eyes of others? Anciently, men looked up to Crœsus (Greek, *Kroisos*), the king of Lydia in the sixth century, B. C., as a man of immense wealth. Thereupon *Crœsus* became a term for 'rich man.' Instead of saying, "A is

a man of wealth," it is more dramatic—certainly when the phrase is new—to say, "A is a *Crœsus.*" Thousands of years later men still say, "He is a *Rockefeller,*" or "He is a *Rothschild.*" *Rothschild* originally meant a 'red shield.' Because a certain family used the symbol of a red shield in their business, perhaps over a tavern entrance, they were named after the symbol; of this we do not think, and need not even be aware, when we use the name of Rothschild to designate any wealthy person. All names, if we could trace them back, have definite meanings. Once they are established as names of persons, however, the original meaning is forgotten by the people. It requires an effort of the memory or consultation of a book really to feel (as we feel other words) that the name *Clark* refers to a scribe or clerk, that the name *Brewer* means precisely what it sounds like. If this is so for names plainly indicating their original meaning, what shall we say of names that conceal their origins, just as most other words do?

When we speak of a rich man as a *Rothschild,* or even as a *Crœsus,* we are conscious of the fact that we have applied a personal name. With other expressions we are not so conscious. For a hundred persons who could explain the origin of these expressions, only one or two could explain that we speak of "a hectoring bully" because *Hector,* in the *Iliad,* was the bravest of the Trojans. (This etymology, by the way, has been questioned.) The fact that Hector itself meant, originally, 'one who holds fast,' has nothing at all to do with the case.

In the method of naming persons after characteristic phrases or attitudes there may be a remote reference to the discredited "ding-dong" theory or the less discredited "bow-wow" theory of verbal origins. When, somewhat derisively, we refer to a maiden as a *touch-me-not,* we are naming her after what is, supposedly, a salient expression in her mouth. This is common practice, especially among the people. Thus, among French names or nicknames we find *Diable me brûle!* or 'Devil burn me!'; *Nom d'un rat!* or 'Name of a rat!'; *Diable m'étrangouille!* or 'Devil strangle me!'—all of which, in its way, is quite as

natural as naming an animal from its characteristic cry. In Silone's novel *Bread and Wine* a returned Italian is nicknamed *Sciatáp,* because he has brought this expression home from the United States. Spelled as it should be, it turns out to be the familiar slang, *Shut up!* In Germany, one of the many designations for the Devil is *Gott sei bei uns!* (God be with us!) because such is the popular exclamation at the mention of his name.

The name of the God of Love, in Sanskrit, fills us with amusing speculation. It is *Kandarpa,* which has been translated, 'What effrontery!' Or, as who should say in less formal resistance, "Don't get so fresh!" Was the God of Love, among the ancient Hindus, a touch-me-not?

The difference between Nietzsche's *Yea-sayer* (*Ja-sager*) and of the *yes-man* of contemporary business is wide and deep. Yet in each case we have a more sophisticated naming of a person after what is supposed to be an affirmative trait. The yea-sayer accepts the conditions of life; the yes-man gives opportunistic lip-service. Each, however (with how different a soul!), says Yes, and so saying is so named.

Names become words; words become names. This is simply another way of saying that words become words—different words. One thing alone in language, as in life, is constant, and that is—change.

Just as the names of persons provide words for things or actions, so do the names of places. The psychology of the process is the same in either case: one word, through a train of associations, calls into being either another word or another meaning for the same word.

We dance the *Boston* or the *Charleston* with fairly complete consciousness of the place that has given its name to the step, just as in the case of *Crœsus* or *Rothschild* we retain etymological consciousness. One reason, of course, is that the origin of such dances as the Charleston is recent; another is that the name of the dance is the name, without alteration, of the city. It requires but a small change in pronunciation, however, to conceal the origin. Even in such familiar examples as

brummagem and *cologne* and *bedlam* we have to be reminded that the first comes from Birmingham, a center of manufacture for cheap jewelry; the second, from the French name for the German city of Köln; and the third from the Hospital of St. Mary of Bethlehem, in London, which has been used, since 1402, as a hospital for the mentally ill. In Hebrew, *Bethlehem* signifies 'the house of food.' The fact that one of the meanings of *bedlam* is a house for the insane has nothing whatsoever to do with the original meaning of the name Bethlehem; the derived meaning comes from the accidental circumstance that a place in London happened to be named after the town in Judea, and happened also to be devoted to the care of "lunatics."

Many changes in words are quite as circumstantial as this, and quite as devoid of formal logic. Associations of ideas have a logic of their own.

Monographs upon word-names and place-names are numerous. The classical work upon the subject is by Isaac Taylor, whose book upon the alphabet is yet another pioneer treatise that, if now out of date, is of great historical importance. The subjoined list of words from the names of people, or from the products or qualities of places and of the people in those places, is but a sample. In each case the word should be consulted in a large dictionary (small dictionaries are for children, or for grown-ups in too much of a hurry) and followed to its ultimate origin.

Words Derived from Names of Persons and Places

PERSONS

Addison's disease
Babbitt
Bartlett (a species of pear; a book of quotations)
Blizzard
Bloomers
Bolivar (type of hat, coin)
Bowie (a knife)
Boycott
Brody (do a)
Burbank
Colt (a revolver)
Cravat (Croatia)
Dahlia
Derby (race; hat)
Derrick

Diddle
Dolomite (Dolomieu)
Dunce (Duns Scotus)
Epicure
Fabian
Fletcherize
Freudian
Fuchsia
Guillotine
Howitzer
Jovial (Jove)
Lazaret (Lazarus, St. Luke, xvi)
Lynch
Martial (Mars)
Martinet
Masochism
Mauser
Mercurial (Mercury)
Nicotine
Peeler (policeman)
Raglan
Sadist
Sandwich
Saturnine (Saturn)
Saxophone
Sequoia
Silhouette
Venereal (Venus)
Vespasian (because of the tax levied upon toilets by Emperor Vespasian)
Wistaria
Zinnia

PLACES

Arab (street Arab)
Bedlam (Bethlehem)
Bilboes (Bilbao)
Bœotian
Bronze (from Brindisi)
Brummagem (Birmingham)
Burgundy (Bourgogne)
Calico (Calicut)
Canary (place; bird; color)
Cashmir
Champagne
Cologne
Copper (Cyprus)
Crayon (from *craie,* French for chalk, from Creta—Crete)
Currants (Corinth)
Cypress (Cyprus)
Dalmatic
Damask
Dindon (French for turkey, so called because it came *d'Inde* —from India, i. e., the New World)
Fustian (Fustat)
Gin (Geneva)
Gruyère
Laconic
Laodicean
Lombard
Madeira
Manhattan
Meander
Parchment (Pergamum)
Port (Oporto)
Sherry (Jerez)
Sodomite
Solecism
Spruce (formerly Pruce; Prussia)
Sybarite
Tartan (Tartary—i. e., Oriental)
Valence
Vandal

§ 4. MANA AND NAMES—OATHS

At the core of the belief in the magic of words lies the feeling that the universe is permeated by a mysterious, all-creative, all-destructive power. For this power, anthropologists generally have adopted the name Mana, which is what the savages of the Pacific call it. The word appears to mean something like power, influence, authority. The thing itself has been compared to the Greek *physis,* from *phyo,* 'to bring forth.' (This is at the base of such words of ours as *physics.*) It would thus be more or less equivalent to Latin *Natura.* As we have seen, there are many, indeed, even to-day, who employ the word Nature, especially with capital letters, to express the otherwise inexpressible concept of that primal power through which the world came into existence and through which it continues.

Natura itself is akin to French *naître,* 'to be born,' and stands for the bringing forth of life or matter. A *nation* suggests, etymologically, a people of the same birth; formerly, when peoples were far more homogeneous than they are to-day, blood-relationship was the foundation of social groups. To bear the same name was a token of this relationship; only later was it permissible for one born out of the group to assume the name of the group.

"Mana," as Mr. Edward Clodd has explained in the opening chapter of his book *Magic in Names,* "is the stuff through which magic works; it is not the trick itself, but the power whereby the sorcerer does his trick." Mana inheres in everything: in blood, in hair, in teeth, in spittle; in shadows, in personal names, in words. It animates, so to speak, all matter animate and inanimate.

Since, to the primitive mind, there is no hard and fast distinction between a thing and the name for the thing, to possess the name is fairly to possess, to control, the thing. When we consider how much we are, in our less civilized moments, ruled by superstitions—fear of the number thirteen, knocking twice on wood to avert reversal of good fortune, carrying "lucky" coins, cultivating "lucky" numbers, "playing

hunches"—it is easier to imagine ourselves back in the times when every word and every act might have a determining influence upon events. We are still, more than we care to confess, in the thrall of superstition and taboo.

If, in ancient social groups, one's name was specially guarded against discovery, it was because to know the name was to be able to use it in evil conjuring. The custom lingers in the fairy-tales that are read by our children. They know the fate of Rumpelstiltskin as well as we know the fate of Lohengrin. The custom lingers, moreover, in certain habits of civilized society: in the naming and renaming of persons; in the evasion of certain words that have come to be frowned upon by society because of their power in calling up unpleasant ideas or circumstances; in the notion, still current, that as an evil name may work evil, a good name may achieve good.

Among a number of peoples it has been a custom to change the name of a dying person, in a last attempt to cheat the Angel of Death. It is the name that Death has come to claim, not the person. Or, rather, the name *is* the person. The custom is still so common that I have known it to be practised in recent years.

Clodd, in the final chapter of the book mentioned, speculates upon the etymology of the various words for 'name' in Irish (*ainm*), Old Welsh (*anu, enu*), Old Bulgarian (*ime*), and many other tongues, and quotes Sir John Rhŷs as equating it with the meaning *soul*. If one's name were considered one's very soul, it is easy to understand the taboos that hedge it about.

Is it any wonder, then, that to accompany such superstitions as astrology, there flourish in our midst such atavisms as onomancy and numerology? *Onomancy* (Greek *ónoma, name*, and *mántia,* 'divination') means divination from one's name. Numerology is a more complicated form of the same superstition. To each letter of one's name is assigned a numerical value, and the computation from the letters made forms the basis for the divination or prophecy concerning the bearer of the name. Onomancy goes back to the magic of names; nu-

merology goes back to the magic of numbers as applied, with much hocus-pocus, to the letters of one's name and the astral influences that they contain. It is thus to be seen that any reform in the spelling of one's name may be fraught with deep consequences, and that therefore an important difference exists between Rosalind and Rosalynd, or between *Katherine, Katharine, Kathryn* and *Katrina*—that is, if you believe in numerology, astrology and onomancy.

If, in Santa Cruz, a son-in-law may not pronounce the name of his mother-in-law, it is because of the more deeply rooted taboo that he must not look upon her face for the rest of his life. If, among the Omahas of North America, the parents-in-law may not mention the name of their son-in-law, it is because of the more deeply rooted taboo that they must not address him.

So completely may the name stand for the person that the assumption of the name of one's parent may symbolize an earlier stage of actual cannibalism.

S. Baring-Gould, in *Family Names and Their Story,* has traced the process by which hereditary nomenclature came about. At first, he says, the members of a tribe, in order to be distinguished as forming parts of the group, underwent bodily mutilation. The custom survives in the tonsuring of priests. for example. Mutilation gave way to distinctive costumes. It was a simpler, and more comfortable, matter to wear a tartan, to part one's hair in a certain way, than to thrust a stick through one's cheek. Tribal names tended to fall away as the exclusiveness of the tribe weakened; as a consequence, personal names alone remained. In the need for differentiating between man and man, however, the personal name—so frequently duplicated—was found to be insufficient. Descriptive names were then introduced to describe the bearer. These were at first limited to the lifetime of the bearer, but later they became hereditary.

Heredity, however, was not always so simple as this. The fables of the children who devour their father (as in the tale of Chronos, the god of time) have a counterpart in primitive

life. According to Herodotus there was a people in Scythia among whom it was a custom to devour one's parents. Such practices among primitive tribes are not merely a macabre sort of gourmandism, nor the madness of famine. They represent a naïve notion of the best way in which a man's virtues may be assimilated.

Cannibalism, of course—the eating of one's kind—is to be found among animals. The word is derived, supposedly, from *Caribes,* the Spanish plural of *Carib,* signifying a man-eating nation of the West Indies; the root is more familiar to us as the name of the *Caribbean* sea. Shakespeare's *Caliban,* it may be observed, probably owes his name to the same word, *Carib,* that gives us *cannibalism. Caliban* could mean a Cariban; transpose two of the consonants of his name and you have Canibal, which is the word *cannibal.* Another variant, current in Shakespeare's time, was *Caribal.* The changing of *l* to *r* or *r* or *l* we are already familiar with; Spanish has *caníbal* and *caríbal,* standing alike for the native names of the Caribs or the Caribbees. Columbus used, as descriptive of the inhabitants of Haiti, *canibales* and *caribes.* Thus we have another instance of a word deriving from the name of a people and becoming a word that signifies their supposed habits or traits.

Cannibal races ate their enemies not only as food, but as a manner of inheriting the heroic qualities of the foe. Just as costume took the place of bodily disfigurement, so in time one assumed a man's name instead of digesting his remains.

Dr. Polle mentions, in the book from which I have already quoted, another benign variation of such cannibalism. Among the South Sea islanders, he says, intimate friends exchange names in the belief that they thus exchange personalities and even establish common ownership of property.

"Quand on parle du loup," says the French proverb, *"on en voit la queue."* "If you speak of the wolf, you can see his tail." Or, as we say, "Speak of the devil, and he appears." The sayings pay tribute to the evocative magic of speech. In order not to materialize one's enemy, one does not mention his

name. One introduces a euphemism or a circumlocution. The Russians must have had reason to fear the bear—the animal that has provided other nations with their symbolical description of Russia. The Russian word for bear is *medved,* or 'honey-eater.' We are told that among the Cherokees, when a man is bitten by a snake, he is said to have been "scratched by a briar." To name the snake would be to hurt his feelings! (And therefore to anger him?) So the Malays fear to name the tiger, lest he answer to the call. So the Kaffirs will not name the lion when in danger of attack, and flatter the destructive porcupine with epithets such as "little woman" or "young lady." [4]

When the Greeks named the Furies the *Eumenides* (that is, 'the benevolent,' 'those of good will') it was not only a euphemism by which the malevolent, those of ill will, were verbally transformed into their opposites; it was also because, so doing, they would not have to pronounce the original name. So, too, night was called *euphróne,* 'the benevolent.' So, too, the Euxine sea received its name. Originally it was called *áxeinos,* or 'inhospitable.' *Euxine* means *'hospitable.'* It is curious to consider that the renaming was the result of a false etymology. The true original name was *axsæna,* or Black Sea. *Axsæna* was misinterpreted as *axeinos.* To-day the sea is named Black, and has thus reverted to its rightful name at last. Sailors may not be notoriously etymological in their habits, but it must have occurred to more than one of them, during a tempest on the Pacific, to wonder why that ocean received that name.

It is in the category of oaths that we find a most interesting blend of taboo, euphemism, and circumlocution. Every language, old, new, savage, civilized, swears by its deities, but avoids naming the deities except under the most solemn circumstances. The taboo includes not only the deities but the temporal rulers, the kings. The Jewish conception of blasphemy, it will be remembered, includes the king—that is, the representative of God—as one who must not be cursed or reviled. It was only at a later stage that the conception in-

[4] Edward Clodd, *Magic in Names,* pp. 90–91.

cluded also an interdiction against pronouncing the forbidden name of God. For God, like mortals, had a secret as well as a public name. Secret names were a protection against the use of one's true name in evil magic. The *tetragrammaton* (Greek *tetra,* 'four,' and *gramma,* 'a letter') describes the four consonants forming the incommunicable name of the Lord.

The name Christ is from the Greek *christos,* meaning 'annointed.' It is a direct translation of the Hebrew *mashiakh.* The name Jesus (Hebrew *Yeshua*) is regarded as meaning 'Yahweh (Jehovah) is deliverance.' Among many Christian peoples there is a psychological objection to bearing the name of Jesus, just as there is a psychological objection to bearing the name God. This objection corresponds to what, among primitive tribes, would be called taboo. A name associated so deeply with beings considered superhuman and sacred does not seem to sit well upon a mere mortal.

Yet this taboo is not universal. In Spanish, for example, *Jesús* is a fairly common name, as are other names with sacred connotations. Among women such names as *Asunción, Concepción, Dolores,* recall religious associations: the Assumption, the Conception, the Mother of Sorrows (*dolores*). In German, the surname Gott is not unknown. This usage is not to be confused with such a combination as *Gottlieb* (love of God) or its Latin equivalent, *Amadeus,* common in Germany; nor is it to be confused with such Spanish names as Juan de Diós (John of God).

The word for God, in oaths, is avoided just as the word for the name of a tribal chief is avoided by tribal taboo. When the Frenchman exclaims *Morbleu!* or *Corbleu!* he is using the sound *bleu* (which seems to be the word for *blue*) to replace that of *Dieu,* 'God.' *Morbleu* stands for *mort de Dieu,* or 'death of God,' just as does our own archaic exclamation *'Sdeath!* The possessive *s* of God's is retained; the tabooed element is dropped. So, too, *Zounds!* is a shortened form of *God's wounds!* with the God left off.

In German, instead of *Gott* the sound *Potz* is employed, as in *Potz Welt* (i. e., 'God's world'), *Potz Stern* (God's star),

Potz Blitz (God's lightning). Rather than say *Teufel* (Devil), many avoid speaking of that spirit, and thus making him appear, by altering the word to *Teuxel* or *Teixel,* just as we say *deuce* or *dickens,* and as the Frenchman, instead of *diable,* says *diantre.*

Gee whiz is a circumlocution for Jesus Christ; *by golly* is *by God; by heck* is either *by hell,* or *by Nick,* or an amalgamation of both; the Dutch *Potverdoeme* is *God verdoeme,* or 'God damn.' Our *darn* and *dash* and *ding it* are various ways of avoiding the word *damn. Drat it* was at first *God rot it!*

CHAPTER VIII

CHILD AND WOMAN IN LANGUAGE

> . . . we ought not really to put the question like this: Are linguistic changes due to children or to grown-up people? The important distinction is not really one of age, which is evidently one of degree only, but that between the first learners of the sound or word in question and those who use it after having once learnt it. JESPERSEN, in *Language*.[1]

§ 1. THE EXPERIMENT OF PSAMMETICHUS

THE SECOND BOOK OF THE HISTORY OF HERODOTUS OPENS with a famous passage:

Now the Egyptians, before the reign of their king Psammetichus, believed themselves to be the most ancient of mankind. Since Psammetichus, however, made an attempt to discover who were actually the primitive race, they had been of the opinion that while they surpass all other nations, the Phrygians surpass them in antiquity. This king, finding it impossible to make out by dint of inquiry what men were the most ancient, contrived the following method of discovery:—He took two children of the common sort, and gave them over to a herdsman to bring up at his folds, strictly charging him to let no one utter a word in their presence, but to keep them in a sequestered cottage, and from time to time introduce goats to their apartment, see that they got their fill of milk, and in all other respects look after them. His object was to know, after the instinctive babblings of infancy were over, what word they would first articulate. It happened as he had anticipated. The herdsmen obeyed his orders for two years, and at the end of that time, on his one day opening the door of their room and going in, the children both ran up to him with outstretched arms, and distinctly said "bekos." When this first happened the herdsman took no notice; but afterwards when he observed, on coming often to see them, that the word was con-

[1] Otto Jespersen, *Language: Its Nature, Development and Origin* (Henry Holt and Co., 1934).

stantly in their mouths, he informed his lord, and by his command brought the children into his presence. Psammetichus then himself heard them say the word, upon which he proceeded to make inquiry what people called anything "bekos," and hereupon he learned that "bekos" was the Phrygian name for bread. In consideration of this circumstance the Egyptians yielded their claims, and admitted the greater antiquity of the Phrygians.

That these were the real facts I learnt at Memphis from the priests of Vulcan. The Greeks, among other foolish tales, relate that Psammetichus had the children brought up by women whose tongues he had previously cut out; but the priests said their bringing up was such as I have stated above.[2]

The tale may have a core of truth, although the folklore of the world has many similar accounts of children brought up in the wilds, frequently with animals as their companions and even as their foster-mothers. Herodotus tells us that Cyrus was nursed and suckled by a bitch; Romulus and Remus, the founders of Rome, were nursed supposedly by a she-wolf. These accounts have been recognized as testimony to the early kinship of man and beast. Frederick II of Sicily and James IV of Scotland are supposed to have performed similar experiments.

From the linguistic point of view, however, the story repeated by Herodotus contains more than one instructive fallacy. Only by accident could two children reared apart from the rest of mankind pronounce a word that had a meaning in any language. Language is not inherited. The child of Greek parents who was born among the Eskimos would, unless specially instructed in the tongue of his father and mother, grow up to speak Eskimo; the child of Eskimo parents who was born in Greece would as naturally grow up to speak Greek unless specially instructed in Eskimo, or withdrawn from Greek life and allowed to hear only Eskimo in his home.

There was only one way in which the children of Psammetichus's experiment could have learned the word *bekos,* and that was by hearing it spoken. Two children thus thrust

2 From the English edition based upon the translation by George Rawlinson, first published in 1858.

together would doubtless, in time, have developed a system of communication; two persons are a world-in-little. That system, however, would be of their own crude invention. Even under the conditions of civilization, children develop so-called secret languages; the language of the children in the tale of Herodotus would not have come under this heading, for it would have been born of necessity. Nor would its meaning have been evident to King Psammetichus or his herdsman; to understand the meaning would have required intensive study. How were these children to know what bread was? Food they would know, but hardly the specific name of a specific food.

Only one element in the story points to linguistic sense: the fact that two children figured in the experiment. Here, at least, is recognition of the social origins of language. Yet, for the results obtained, two were not necessary. Children babble, even without the presence of others. And, since the royal investigator appears to have believed in the hereditability of language, a solitary child might, just as well as two children, have babbled forth the word *bekos*. The word is not, moreover, such a word as would have developed in the normal intercourse between the children. They did not receive their food from each other; they received it from the herdsman. Indeed, they received it more directly from the goat, and there is no reason why they should not have spoken rather to the goat than to their humble custodian, since the custodian was forbidden to utter a word in their presence. The goat may well have "spoken" as they drank at his udders; one theory, indeed, seeking to account for the sound *bekos*, regards it as a child's echo of the brute's voice. This is more scientific than belief in the tale as told. Yet that tale has found among some linguists, if not acceptance, a certain credence.

§ 2. WORDS FROM BABY, MOTHER, AND FATHER

It is the child who appears, with its infantile babbling, to have provided the fairly universal words for itself and for its parents. *Ma* and *pa* are variations of a single vocal activity —that of forcing breath through the lips, or even of sucking it in. *M* is pronounced with a closing of the lips, the voice issuing from the nose; *p* is formed by tightening the lips and expelling the breath between them. *B* is a softer, a voiced *p*.

From the earliest sounds made by the infant in its chief activity, that of suckling, come the names *pa* and *ma* and their multitudinous variants. *Mamma* is but a reduplication of *ma,* as *papa* is of *pa.* Reduplication is a common habit among children; originally it is simply the repetition of a sound that has caught the fancy of the infant as it instinctively develops the various muscles concerned with breathing and talking. To one another we say, "Good-bye"; to a child we say, in imitation of its own early habits, "We'll go bye-bye." To one another we say, "Good night"; to a child, or to one another in jesting moments, we say, "Nightie-nightie." Or, if it has been mischievous, "Naughty-naughty."

Once the words for mother and father were established, the extension of meaning to which all words are subject would operate with special fertility upon such central terms. The breasts are called *mammary* glands. Animals who suckle their young are called *mammals.* Italian *bambino* or *bimbo* stands for 'baby.' *Babbo* is 'father'; *poppa* is 'mother's breast,' as is the French, *poupon.* Latin *amma* is 'nurse'; *amita* is 'aunt.' *Papilla* is 'bosom.' So is *mamilla.* German *Amme* is 'nurse'; Spanish and Portuguese *ama* is 'housewife'; *amo* is the 'master of the house.'

Once again the Latin *amo* (I love) appears. "Out of the mouths of babes. . . ."

Carnoy believes that the Latin lullaby, *ninna nanna,* provided the Spanish word *niño,* 'infant,' as well as the Italian *nonna,* 'grandmother,' and the French *nonne.* In Spanish,

one of the phrases for 'to sleep' is *hacer la nana* (to make nana). *Nun* is a variant of such terms as *nonna* and *nonne*.

In the matter of words that are attributable to the babble of infancy it is easy, in specific instances, to go astray. We do not, and we cannot, know what a primitive baby was like. Moreover, was it the baby—even the primitive baby—who learned from the mother, or the mother who was taught by the child? For linguistic purposes, it is perhaps wise to consider mother and child as a unified pair. This agreed upon, it is nevertheless a reasonable conclusion that much of the baby-mama-papa vocabulary originated in the primitive counterpart of the nursery.

Once the syllables *ba, ma, pa* were associated with the ideas of baby, mother and father, their later development was bound to take courses that would, by association, lead to complicated linguistic results.

The child, thus considered, must have been one of the earliest sources of echoism. To call a dog a *bow-wow* sounds, even to contemporary ears, like a pleasant conspiracy between mother and child. Such words as *pigeon,* which is a development of the people's Latin *pipio,* have been regarded as children's echoisms; so, too, the Sanskrit *kurkura,* meaning 'dog.'

The fact that the words for *mother* and *father* reveal striking similarities in many tongues does not, of itself, argue for their origin in baby's prattling. Once a word is established, its later fate depends upon the changes caused by usage. Baby's creative association with it has ended.

Thus, whatever the original sound that resulted in such roots as *ma* and *pa,* the Greek words *mater* and *pater* proceed on their historic course unaffected by the circumstances of their beginnings in the infant's mouth. And so do all words for mother and father. The idea of maternity, paternity and offspring is naturally one of the basic notions of humanity, and the associations thus established will as naturally show in the outbranchings of words. An amusing example of such association is afforded by recent race-track history. The off-

spring of that phenomenal racer, *Man-o'-War,* was named *Battleship.*

The verbal development of mother and father relationships, as of sex relationships, reaches into every department of thought. We have, in poetry, *male* and *female* rhymes; we have, in plumbing, *male* and *female* jointures. We have *mother*-tongues and *father*lands. A *patriot* is a member of a *patria,* which is Latin for 'fatherland.' (Latin *pater,* 'father,' is from the Greek word of similar sound, as is Latin *mater* from the slightly different Greek *mātēr.*) Such terms as *paternity* and *maternity,* or, to give them their Teutonic forms, *fatherhood* and *motherhood,* are a far cry indeed from infantile lip-fumbling, just as far as *lallation* is from the half-helpless *la-la* of the baby.

A *matrix* is, at first, a womb—the mother-mold, as it were. From this primary meaning it is easy to see how it was predestined to mean any type of mold.

It is thus not too fanciful to accept the suggestion that the word *matter* (Latin *materia*) is intimately associated with the word for 'mother' (*mater*). Matter, thus regarded, would be the mother-stuff of the universe. From *materia* as the mother-stuff of the universe it is an easy step to the Spanish and Portuguese words for wood: *madera* and *madeira,* respectively. For wood was, and remains, one of the essential substances in the world. It must once have appeared to some men as *the* substance.

Observe now the capricious manner in which matter evolves. *Madeira,* to us, as English-speaking persons, suggests not wood but wine or lace. How does this come about? There is, near Morocco, a large island named Madeira. It was so named because it is well wooded. Because the spelling of the name is Portuguese rather than Spanish, we may suspect that it was the Portuguese who discovered it. On that island is made, among other things, wine. Among those other things made is a type of embroidery; hence the name Madeira for the wine and for the work done by the nuns of Madeira. There is even a Madeira wood—the mahogany of the island. *Madeira*

wood is much like saying, if one thinks etymologically, *wood wood;* the truth of the matter is, however, that we talk with words, not with etymologies.

Father-words are as numerous as mother-words, and are subject to the same evolutionary changes. Greek *páppos* means 'grandfather'; it means also "the first down on youth's cheek" —that is, the first token of manhood. *Papparium* (Latin) signifies 'pap.' *Papai,* in Sardinian, means 'to eat.' German *pappe* is 'paste,' or 'pasteboard,' which suggests *pap.* Russian *pappo* may mean 'bread.'

The most glorified form of the syllable *pa* is the capitalized word *Pope.* In another linguistic direction the same infantile syllable becomes *Father,* which is what *Pope* means. In no other way did the word *abbot,* 'spiritual father' (Greek *abbas*), arise. That childish babbling should, in the course of time, provide such exalted notions as these, should be no more surprising than that primitive man should have produced language in the first place. The child is father to the man; and man is father to language.

§ 3. PLAY IN LANGUAGE—CHILDREN'S TONGUES

The child plays with its muscles, and the tongue is a muscle. Once it has learned that vocalism has other possibilities than those of summoning food or assistance, it explores these possibilities. Children are fond of playing with words, of distorting them, of varying them, of making nonsense rhymes and hearing them, of inventing secret languages. Perhaps we have here the origin of some of the delight—surely not all—that adults take in alliteration and rhyme, in puns, and in other forms of verbal trickery.

Perhaps there is some connection, too, between the speech of children and the disturbances of speech that occur in adults. Children and the so-called primitive peoples appear to share a habit of chatter for chatter's sake; that habit resembles what is called, by psychiatrists, *verbigeration,* or an uncontrolled repetition of words or sentences. The attempts of Gertrude

Stein to make artistic employment of what to many of us looks like an almost phonographic iteration suggests at one end the chatter of children and at the other the verbigeration of an unfortunate adult.

Chamberlain quotes a case from the records of Drs. Peterson and Langdon in which a woman, after a phase in which she rhymed all day long, proceeded to verbigerations such as "I want to go home to my children in New York; won't I be glad when I get home to my children in New York! What good times I'll have when I get home to my children in New York! . . . to my cosy home in New York. . . . When I get into the car which takes me to my husband and children in New York." It reads like the work of a precursor of Gertrude Stein, except that it is slightly more interesting than "a rose is a rose is a rose." Jespersen reports from his readings a Danish girl of three who had a "curious knack of twisting all words into rimes: bestemor hestemor prestemore, Gudrun sludrun pludrun." This parallels exactly the case of the woman I have just mentioned, who, in her rhyming or assonantal phase, would repeat such a series as "moccasins, vocassins, doccasins . . ." or "babies, tabies, gabies, sabies. . . ." [3]

The so-called secret languages of children are found all over the world. They represent largely a more systematic distortion of words. A simple plan is at the basis, as may readily be deduced from the common practice of the children that we know. *Areway ouyay oingway outway?* (Are you going out?) places the initial consonant at the end of the word, and adds *way;* in case the word begins with a vowel, the *way* is added directly. When I was a child in Boston, and the era of rag-time was upon us, we spoke a tongue in which *What are you doing?* was transmogrified into *whagadat agadare yagadou dagadoing?* The trick was to break the vowel by inserting a *gad.*[4]

[3] A. E. Chamberlain, *The Child: A Study in the Evolution of Man,* pp. 156–157. Jespersen, *op. cit.,* p. 149.

[4] According to my good friend Isidore Witmark, founder and president of the great musical firm M. Witmark & Sons, which continues under that name in the control of Warner Brothers, it was his brother Frank who invented this "rag-time" treatment of the language.

In French there is the *loucherbème* language, so called because its model of transformed words is *boucher*. The initial consonant is moved to the end, and *em* is added; *l* is prefixed to the resulting word. Then there is the *largonji,* which is simply jargon, with the initial consonant transposed to final position and *i* added, while an *l* is prefixed to the resulting word. *Mourne* is the name of a Savoyard jargon that turns *chambre* into *brachanna, quatre* into *treca, clocher* into *chiclo,* and so on.

In Spanish, *Germanía* practices a similar inversion: *pecho* gives *chepo; negro* gives *greno.*

In Germany there is the so-called *p-Sprache (p*-language) of school children which resembles our own rag-time speech. *Ich habe ein Hut* (I have a hat) becomes *Ipich hapabep eipepen Huput.*[5]

These "secret" languages are not to be confused with what looks like a more genuine type of children's language, such as develops when children, through one circumstance or another, are left much alone. The "secret" languages are not new creations; they are founded, for the greater part, upon the language that the children already know, but are more flexible than the children's tongues. Children's languages probably contain many onamotopes; they practise wilful distortion, as in one language of Boston children who turned every adverbial ending *ly* into *losh,* so that *terribly* became *terriblosh.* But "a certain percentage of words were absolutely independent, or at least of obscure origin. The grammar tended to Chinese or infantine simplicity; *ta* represented any case of any personal pronoun." [6]

Twins have been known to develop a sort of *lingua franca* that their own parents could not understand. Just why some eminent psychologists should have rejected the notion that children can invent words is difficult to appreciate. Even between tots there may be a sort of crude intercourse out of which evolves a reciprocally understandable sound. This is

[5] A. Carnoy, *La science du mot,* p. 80 ff.
[6] A. E. Chamberlain, *The Child and Childhood in Folk-Thought,* p. 262.

enough to create a word. The evolution of the great languages is in the same tradition. That which segregates groups speaking the same language tends to introduce differences into that language. Any group within the larger group tends, through certain common interests, to evolve a dialect of the language spoken by the larger group. The talk of children is very little different, essentially, from "shop" talk or professional chat; it represents a specialized interest.

Jespersen, a cautious yet very human scientist, is not inclined to accept mystical explanations. He smiles, for example, at Grimm's elucidation of certain fundamental changes in German pronunciation on the score of the Germans' love for liberty. He smiles equally upon the heroic character of the Vikings as the explanation of the great linguistic changes that took place in the Scandinavian languages during the Viking age. For these important alterations he finds a cause less recondite, just as he does for the difference in the language of the educated Londoner and the London poor: "the men were absent and the women had other things to attend to than their children's linguistic education. I am also inclined to think," he continues, "that the unparalleled rapidity with which, during the last hundred years, the vulgar speech of the English cities has been differentiated from the language of the educated classes (nearly all long vowels being shifted, etc.) finds its natural explanation in the unexampled misery of child-life among industrial workers in the first half of the last century—one of the most disgraceful blots on our overpraised civilization." [7]

The slang of grown-ups, especially in its self-conscious phases, reveals a delight in linguistic play that has its relationship to the play of children with speech, and to the specialized tongues of which I have just spoken. There are far more languages than we realize; in a sense, everyone's language has its individuality, and no two persons speak precisely the same tongue.

[7] Jespersen, *op. cit.*, p. 261.

§ 4. "BABY" TALK—CHILD PHONETICS

The child begins to speak, generally, during its third year —that is, between two and three years of age. It is, and not only so far as concerns the acquisition of language, at this stage an imitative animal. Its hearing is, even if acute, unskilled. Its breath control and its speech organs are immature. Its teeth will later give way to a second set, which will find a larger mouth—that is, a larger resonance chamber—to occupy. Its tongue is without the skill that it is to attain—perhaps excessively!—in its years of maturity. In a few words, the child's phonetic (i. e. sound-producing) system, whether regarded from the psychological or the physiological point of view, is in a transitional state.

For this reason, incidentally, it is hardly wise for fond parents or relations to talk "baby" talk to a child. "Baby" talk, strictly speaking is adult talk, not "baby" talk. To the baby, speech is a serious attempt to reproduce the sounds that he is hearing from his elders. To have impressed upon his mind, at a time when he is finding it hard enough to reproduce the sounds of his native tongue, another set of sounds that confirm him in his inevitable errors of reproduction, is to do him a disservice.

Let the "baby" talk pass, however; it has its uses for exclusive employment by adolescents, and by lovers in moments of intimacy that should not be overheard.

The child, during its early years, when there is being established the phonetic system that is to be his during the rest of his life, is establishing at the same time a series of organic movements. He is establishing also a special ear-training for the sounds of his native speech. That is why it is to be so relatively difficult for him in the years of his adulthood to learn how to hear and how to speak a foreign language. His ear and his speech organs are, to use the newest word for the phenomenon, "conditioned" to the sounds and the muscular motions of his own language.

It will be observed that I mention the hearing as well as the speaking. The man or woman learning a foreign tongue is doing double work, as it were. He is, for the moment, trying to forget his own language, and trying to hear the new one with the unspoiled ears of the child. He hears imperfectly, for the sound-system, the phonetics, of his native language inevitably come between him and the new system. He reproduces imperfectly, not only because he has heard imperfectly, but because his vocal mechanism has been trained to reproduce the special sounds of his native language, not the new set of sounds.

This is one reason why some persons who pride themselves upon speaking this or that language without an accent are so easily detected as foreigners by a person habitually using the other language.

In the inevitable differences between the manner in which a child hears and reproduces its native tongue and the manner in which its parents speak that same tongue was seen one of the chief causes of linguistic change. This theory has been discredited.

The frequently perceptible differences between one generation and another are to be sought, then, in other, more basic, causes.

More important for language may be the child's habit of reduplicating sounds: *pa* becomes *papa; ma, mamma; dad, dada;* the smoking of a cigarette, *foo-foo;* food, *nyam-nyam.* Nicknames and pet names often show the same reduplication; *Gigi* for Italian *Luigi; Beppo* for *Giuseppe; Lola* for Spanish *Dolores.* What relation, if any, this may have to the reduplicated stems of Greek and Latin verbs I do not know. The child's duplications appear to occur on the accented syllables. Children shorten many words by dropping the syllables before the accent: *bil* for *automobile,* as accented on that syllable; *tina* for *concertina,* and so on. This may be because, as has been said, the child can handle monosyllables or short words; it may also be because he hears or concentrates upon,

chiefly, the accented portion. After all, *'varsity* and *'backy* (tobacco) are not children's words.

We are inclined to smile indulgently at the mistakes made by our children while they are learning to speak. Their trouble with irregular plurals, with irregular verbs, with irrational spellings, with all the irregularities, indeed, that gave us so much bother in our own childhood, arouses fond memories and evokes a tenderly didactic emotion.

Is it we, really, who at such moments are teaching our children? Or is it they, if we but had the discernment to discover it, who are teaching us? Does their helplessness in the face of these linguistic and orthographic curiosities point to a day when the human race, and not only its children, will demand of language and of spelling a determined correction of the irregularities that have been complacently taken over from less rebellious and less exigent forerunners?

The difficulties of the child with grammar, spelling and other aspects of language are not all inherent in the nature of the subject. They may also be symptomatic of defects that must some day be remedied. Here, too, a little child may lead us.

§ 5. WOMAN AND SPEECH

If there are children's languages, and if the child has a definite effect upon language as a whole, there are women's languages, too, with a definite effect of woman upon language as a whole.

Consider the effect upon language of such tribal customs as obtain in certain parts of the tropics, where, after the birth of a child, all intimacy between the parents ceases for some three years. The result of such a taboo is that two distinct societies are created within the social group. On the one hand there is the maternal society, consisting of mother and child; on the other, the paternal society, consisting of the father and, in Melanesia, the younger men who have not yet

found wives. One of the groups is distinctly feminine; the other, as distinctly male.

The prolonged suckling of the infant, resulting in a close association between mother and child, to the exclusion of the father, means the formation of a special language-group in which the father does not figure. So, too, the prolonged association of the males would tend to give to their dialect of the native speech a decidedly male cast.

There are other reasons for a distinctly feminine dialect of a primitive tongue: linguistic taboo. As man may not pronounce the name of his Lord, so, in many earlier cultures, woman may not pronounce the name of her man or of his father. A woman who must not pronounce the name of her father-in-law or his brothers must be careful, too, not to pronounce any word that sounds like that name. As a result, a complicated system of circumlocutions will arise, and words will be twisted out of their normal sounds. The evidence of anthropology on this score is overwhelming. Women, among the Amazulus, in order to avoid mention of their husbands' names, refer to them as "Father of so-and-so"—that is, of one of their children. Among the Kaffirs, no word containing the principal syllable of a husband's name may be pronounced by the wife. The rules differ from one savage tribe to another, but the general principle of a male name-taboo enforced against woman persists.

Let us suppose that this taboo was part of our own culture. A certain woman's husband is named *Jimmy;* her father-in-law is named *Henry.* At once the word *jimmy,* meaning a short crowbar, would disappear from her vocabulary, as would such a word as *hennery* and perhaps, in time, *henna.* She could not indulge in such a harmless oath as *By Jiminy,* which goes back to the Latin *Gemini,* or 'twins' (Castor and Pollux), who form one of the signs of the Zodiac. She might even fear, in time, to speak of *jimson-weeds* (*jimson* comes from *Jamestown*). When it is remembered that men have many names, it will be seen that the vocabulary of womankind, under such a system, would undergo a radical alteration.

Such a habit of mind, furthermore, could not be without its effect upon life in general; indeed, it is but part of a spirit that invades all living.

There are other, less primitive, types of women's languages, or of languages affected deeply by the psychology of womankind. Yiddish is a dialect of Middle High German, with a documented history of some five hundred years. One of its names is *Weiber-Teutsch,* or 'women's German.' Why is this? For long it was considered a disgrace for a male to have recourse, especially in print, to Yiddish. He was supposed to be intimately conversant with the holy tongue, Hebrew, which is a member of the ancient Semitic family. Women, who were not required to know Hebrew, could read their prayers in the language of the folk, Yiddish. Hence the designation *women's German.* For a man to read prayers in Yiddish meant ignorance of Hebrew, which was a major crime against culture.

In a similar category of cultural division is the custom, in Sanskrit drama, of having the women and the lower order of men talk Prakrit and the noble males Sanskrit. There is this distinction to be observed, however; Yiddish and Hebrew are two different languages, whereas Prakrit and Sanskrit are, respectively, a later and an earlier phase of the same tongue.

A similar example of linguistic division, applied culturally rather than sexually, is the age-old battle between Latin and the vernacular. Latin, as the language of religion and culture, acquired the dignity that goes with church and university. The vernacular was the language of the common people, and the almost faded mark of this subordination appears in the very etymology of the word: *vernacular* is from *verna,* 'a slave born in his master's house,' from which the adjective acquired the meaning of *native* or *indigenous.*

In an important sense all languages have, even to-day, a woman's language and a man's, just as they have a children's language. Between the approach of woman to speech and of man to speech there seems to be an inherent difference based upon sexual psychology.

The influence of woman upon language, whether in the early days of speech or in the homes and schools of our own day, must be regarded as enormous. I must confess that I cannot at all understand how so progressive a spirit as Madvig could have written that woman had no share in the framing of our first languages. She affects, and cannot help affecting, such diverse aspects as intonation, formation and choice of words, attitudes. It is possible, in fact, that she affects them too much; or, to state the same idea differently, that man, in the early life of our children, affects these aspects too little.

Woman is the school-teacher of the early grades; women are the governesses, and otherwise substitute for the mother; the child in its formative years sees more of women than of men—indeed, than of its own father. This must have its psychological, as its linguistic, effects. As there are typically childish expressions, so there is a typically feminine imprint upon language. This is all as it should be. The conditions that produce child expressions and feminine imprints upon language are those that, if exaggerated, produce children's languages and women's languages.

Such languages are less likely to develop in civilized communities. A suggestion of the forces that lie behind them is to be gleaned from the specifically feminine vocabulary of our own time, or even of our own circle. Much intimate talk among women is addicted to niceties that approach the status of finickiness, or to forms that assume the presence of tender children. *Nice* is not, to many ears, a masculine word; neither are *cute* and *cunning,* nor any number that the reader may call to mind. Such formations as *dydee* for *diaper, nightie* for *nightgown,* suggest at once a feminine origin or, certainly, feminine adoption. *Hankies* for *handkerchiefs, panties* for certain "inexpressibles" or "unmentionables," *booties* for infants' footwear, *goodies* for *candy, goody-goody!* as an expression of gladness, *lingerie* for *underwear,* all suggest feminine influence. *Itsy-bitsy* (*little bit*), *teeny-weeny* (*tiny* and *wee*) or *teensy-weensy,* are feminine or effeminate. Some of these are euphemisms, of course. *Lingerie,* besides being a euphe-

mism, suggests also a class distinction. The poor do not wear *lingerie.*

Among the niceties that seem to bear the imprint of feminine origin are such words as *abdomen* for *belly;* in the common mispronunciation that places the accent upon the first syllable instead of upon the *o,* there seems to be a symbolic evasion of that belly-like vowel.

Woman has been regarded as generally more conservative than man, and not only in language. She seems, from childhood, instinctively more histrionic, more eager to please, more inclined toward doing and saying the "right" thing, the pleasant thing. In pronunciation, unless there are special reasons to the contrary, she is more a purist than man, adhering more closely to the "right" sounds and avoiding the introduction of new matter.

The addiction of women the world over to the use of emphatic or intensive words is a linguistic phase of a trait that marks the sex; its written phase is the habit of underlining words and phrases. In general, women employ a more ceremonial style than men, and are more given to what might be called the etiquette of language.

Expressions such as *frightfully* interesting, or *terribly* good, or *too too divine* or *utterly* disgusting, suggest original use by women. The word *awful,* in its primal meaning, stood for 'full of awe,' just as *terribly* suggested, at first, *terror,* and *divine* suggested *divinity,* and *frightful* suggested *fright.* Continued use of such words to qualify rather ordinary events or feelings led naturally to their weakening. To-day, if we really mean *awful* or *frightful* we have to cast about for other words.

All this, certainly, should be no more surprising than that women wear different clothes from those of men. Or, for that matter, that women are more likely to make regular use of diminutives than are men. Or that women's pitch of voice should be higher than that of men. The instrument (the vocal organic mechanism) is slightly different in the case of the female; this does not in any essential respect alter the language spoken by a man and woman of the same tongue.

The use of diminutives is second nature with a mother addressing her child. So it is with the father, except that he does not seem to carry the habit into his other human relationships. The same instinct that leads lovers to converse in baby talk leads them also to make excessive use (for the outside ear) of diminutives. Children adopt a like linguistic attitude toward themselves and toward their pets, animate and inanimate. Mantegazza, as quoted by Chamberlain,[8] explains this use of diminutives as part of the "desire to merge oneself in another, to abase oneself, to aggrandize the beloved." In any case, there is an attempt to make ourselves smaller, as if bending down to, or over, the tiny object. Classical scholars will perhaps call to mind the famous lines of Catullus:

Animula vagula blandula

in which the diminutives in *la* have a felicitous (and perhaps not altogether accidental) suggestion of the infantile tongue-play.

Remy de Gourmont, in an essay upon "Woman and Language," [9] looks upon woman as the one who gave to primitive chattering the fixed quality of words. She rebelled, as one too busy, against the constant renewal of meanings, and therefore against novelty. Woman becomes, in this essay that sometimes overflows into poetic mysticism, "language incarnate." Woman becomes, moreover, the inventor of the "lie," which is "the very basis of language and its absolute condition."

The use of the word *lie* in such a connection is unfortunate and misleading. A metaphor is certainly a transposition of reality, but it is not a premeditated falsehood. Even De Gourmont finds it necessary to qualify his word: "Lie, let it be understood, here signifies the expression of an imaginary sensation. It is a matter of psychology, not of morality—separate domains." Psychologists recognize "psychopathic lying," which is an illness rather than an attempt at deception. The kind of "lie" at which woman is adept belongs closer to what

[8] *The Child and Childhood in Folk-Thought,* pp. 268–269.

[9] To the English reader it is most accessible in an excellent translation by William Aspinwall Bradley, as part of a volume entitled *Decadence.*

we call art than to what we call deception. It is a practice not at all confined to woman.

There is "lying" among young children, too, and a much misunderstood habit it is. Youngsters of five, let us say, who have hardly had the time to develop, or to acquire from their elders, an ethical attitude toward the universe, play with ideas just as, in their infant days, they played with sounds. The play instinct does not cease with elementary and exploratory motions of muscles, with rudimentary exercise of the vocal organs. Once ideas appear, they, too, are played with. To grown-ups, nonsense is a temporary release from the inexorable laws that govern the universe. We respond to Walt Disney's animations on the screen, to Lewis Carroll's Alice, to the topsy-turvyland of Gilbert and Sullivan, because, for one thing, they carry us back to the irresponsibility of childhood. If the child, in his play with speech and with ideas, "lies," so do Disney, Carroll, and Gilbert and Sullivan "lie." This is a sorry conception of lying.

"At first," writes Dr. B. A. Hinsdale, "the child has no more idea of telling the truth with his tongue than he has of telling it with his eyelids or his toes." [10]

Yet in a number of important respects the opinions of the folk and of the linguistic specialists find agreement: women have the linguistic gift—that is, they "take" more quickly to words than do men; they talk more; they hear more; they answer more quickly. "A man is slower: he hesitates, he chews the cud to make sure of the taste of words, and thereby comes to discover similarities with and differences from other words, both in sound and sense, thus preparing himself for the appropriate use of the fittest noun or adjective." [11]

This may explain why man, and not woman, has achieved such high distinction in linguistics. Precisely because woman is quicker with words, whether hearing them or speaking them, she is less likely to develop a scientific attitude toward them. She is interested in concrete matters. Man is more in-

[10] *Teaching the Language-Arts,* p. 36, *note.*
[11] Jespersen *op. cit.,* p. 249.

clined toward abstraction. Woman may thus be regarded as the talker par excellence, and man as the codifier of talk. Woman is loquacious; man is linguistic. How such an outlook squares with the practices of contemporary diplomacy, and how the conception of woman as the original "liar" squares with the characteristics of that same diplomacy, it is embarrassing to say.

Diploma is from Greek *diplóos,* 'twofold'; *duplicity* is from Latin *duo,* 'two' and *plicare,* 'to fold.' I do not, however, draw any deductions from this twofold etymology.

CHAPTER IX

HOW SOUNDS ARE MADE

Those who try to learn new sounds by ear alone, without any systematic training in the use of their vocal organs, generally succeed only partially. HENRY SWEET, in *A Handbook of Phonetics.*

§ 1. THE VOICE AS AN INSTRUMENT

FROM THE MOMENT THAT THE LAYMAN BECOMES CONscious of his voice he is a phonetician of sorts. He does not, to be sure, know the terminology of the science, but terminology—especially when the reasons for it are understood—is easy to acquire. He does know, however, much more about the voice than he may realize. This knowledge is the most valuable kind of knowledge; it is based upon practical experience. After all, the layman has been talking since he was born. He has also—let us hope—been listening.

He can distinguish persons by their voices—soft voices, harsh ones, high-pitched, low-pitched, musical, grating, and so on into a surprisingly long list of classifications. He knows much, too, about the types of sound that go to make up the significant noises called words. He may not be able to define a vowel, but he knows that there are sounds made by simply opening the mouth and forcing breath from the lungs through the vocal cords. That the word *vowel* is derived from the Latin *vox, vocis,* meaning 'voice,' [1] and more directly from *vocalis,* meaning 'vocal,' he need not know, although such knowledge, by giving a definite name to a phenomenon, helps to clarify the experience and make it easier to talk and reason about.

[1] Latin and Greek nouns are often given in both the nominative and genitive forms because the stem of the word appears more fully in the genitive case.

The layman knows, too, that most sounds are more complicated than vowels—that in making them the lips are frequently closed, with or without the coöperation of the nasal passages. He really does not have to be told that there is a difference between a *p* and a *b*—that the *p* is made in much the same way as the *b,* by placing the lips together, but that the *b* has voice, while the *p* has none. He has a fairly definite notion that *g* comes somewhere from the back of his mouth, near the throat, with voice, while *k* comes from the same region, but without voice. If he is somewhat more observant than his neighbor, or if he has had teeth removed and replaced, he knows that certain other sounds—*t, d, s, th,* for example—require the collaboration of the teeth. If he watches his tongue, he will find that as he speaks it touches now his palate, now his teeth, now his gums.

Speaking is easy—often much too easy. The mechanism of speech, however, is a complex matter; so is the psychology of speech. It is a mistake to think of the mechanism and the psychology as of separable, distinct elements; they are different aspects of a complicated organism. It is quite as great an error to separate the organs that take part in speech from the mind that is associated with those organs—as great an error, indeed, as it is to separate the emotions and the intellect. Such distinctions are useful for study; but we must not fall into the too common error that because we can separate events or actions into distinct words, therefore the events or the actions themselves are separable. If we did not possess what we call our vocal mechanism, we could not speak, regardless of the mind. If we did not possess a mind, we could not speak, regardless of our vocal mechanism. There is no reason to believe that our voices were made for the purpose of speech. We have, in the course of uncounted ages, adapted our vocal mechanism to speech just as we have adapted our hands to technological craft.

The study of speech—how human sounds are produced, how they are modified in the individual and the crowd, how they act upon each other—has been made to appear highly

technical and, for the average man and woman, all but forbidding. We may frankly admit that, of all the branches of language, it presents, even outwardly, the most alienating aspect.

This is to be regretted, and for more than one reason. Phonetics, in its deeper implications, is not child's play, surely; but neither is it an impenetrable mystery. As a specialty in linguistics it demands intense application, scientific detachment, and the ability to concern oneself with seemingly dry details. Yet for the layman it has, without being denatured, its agreeable excitements. Without the development of this science by patient, and even heroic, investigators, we should still be in a fog of loose conjecture about languages and their relationship to one another, unable to appreciate the true significance of ancient documents and excavated inscriptions.

Specialists recognize a distinction between *phonetics* and *phonology*. According to this distinction, *phonology* is the more inclusive term, embracing the *history* and *theory* of sound changes in general. *Phonetics* deals with the analysis and classification of the speech-sounds themselves.

Speech-sounds are named, by specialists, according to those parts of the speech-mechanism that are employed in making them. The system of nomenclature is really simple, however formidable the names may appear at first. Even the names are simple, once the general reader learns what they mean. It happens, as in many other pursuits than the study of speech-sounds, that there is more than one name for the same occurrence. This, to a beginner, may prove confusing. The possibility of confusion disappears, however, as the reasons for the names become evident and as the names themselves become familiar. *Phonetics,* as the title of a science, has a somewhat forbidding sound. The science itself, however, is far more interesting and far less formidable than its title.

Phone, Greek for 'sound,' is familiar from the numerous combinations in which it is met. *Phonetos* is Greek for 'to be spoken.' *Phonetikos* is the same word with the adjectival ending *ikos* (our suffix *-ic*). *Phonetics* is as simple a word as *ath-*

letics. How many persons, unskilled in linguistics, know that an *athlete* is a contender for a prize—that his English name derives from the Greek *athletés,* which in turn is related to *athlein,* 'to contend for a prize'—that *athlos* is a 'contest,' and *athlon* the 'prize' awarded in the contest? For every such person, dozens of average persons know that all words in which *phon-* is an element have reference to sound: *phonograph, telephone,* which, respectively, denote sound-writing and transmission of sound across distance (literally, 'far-sounding').

The phonograph is an instrument that records (writes down) sound. More precisely speaking, the phonograph is an instrument for reproducing the sound thus recorded; the recording is in the wax record. *Phonography,* as a term for shorthand, is a different use of the same metaphor: the recording of sound. Only that phonography, thus interpreted, is, precisely speaking, not the recording of sound but the symbolic representation of the sound. The wax record actually records; shorthand represents by symbols that require translation. So, for that matter, does ordinary writing. *Stenography,* as a term for shorthand, is somewhat better (because more precise and less confusing) than *phonography. Steno* is from a Greek word meaning 'narrow'; stenography is thus narrow (that is, condensed) writing. One of the new applications of the typewriter is to the typing of stenographic symbols; this is called *stenotypy*—the typing (instead of the writing) of stenography. Consider what formidable words *stenography* and *stenographer* would have been, had not the activity and the agent for which they stand become so common in our everyday commercial life. When one considers how easy it is to look up a word, it is astounding to realize how many otherwise intelligent persons go about suffering from verbal phobias.

Since voice is a phenomenon of sound, it is subject to the general laws of sound production. To this study, in its larger aspects, is given the name *acoustics,* from Greek *akoúo,* meaning 'I hear.' So far as concerns phonetics, the student of language need know of acoustics only what, again, he has already

observed pragmatically. He knows that if he strikes, for example, a thick glass it will give out a sound lower than the one emitted under the same circumstances by a thin glass. He knows that the tighter he stretches a string, the higher the tone it will give forth when plucked; he knows that a long tube of a certain width will give out a deeper tone than a short tube of the same bore. In other words, he has pragmatic (that is, experiential) acquaintance with the relation between the pitch of sound and the tension, thickness and length of the vibrating medium. The greater the tension, the thinner the material, the shorter the string or tube, the higher the tone.

Perhaps it would be better to think of our two vocal cords as lips or reeds rather than as cords. For these lips, the vibrations of which produce voice, are not simple strings, such as those on a violin. The strings of the violin cannot, as the vocal lips can, contract and lengthen at will, become thinner or thicker under the influence of emotion. The violin has to have four strings, of differing thickness; the strings, moreover, have to be shortened by placing the fingers upon them and thus limiting the portion that vibrates under the bow. Placing the fingers upon the string produces a *stop*. The unstopped string is called *open*. Such an instrument as the piano requires, for the same purposes, a multitude of strings, increasing in length and thickness. Each string can give out but a single tone, varying in duration and intensity according to the skill of the player in striking the key and employing the pedals.

The vocal lips, on the other hand, constitute a wonderful instrument that makes all these adjustments of length and thickness automatically, with a startling dynamic flexibility. Did we not use it daily, without thought of how it works, we should not cease to marvel at it. If the voice were not thus adaptable, it would be unbearably monotonous. Expression, in the sense of finely shaded tone, would be all but unknown.

The fundamental qualities of the human voice are the qualities of any other musical instrument. It has variability of pitch, varying intensity of volume, the capability of maintaining itself (i. e., duration). Change of pitch is a matter of

vibrations; the greater the number of vibrations, the higher the tone. Intensity of sound is directly proportional to fulness, or amplitude, of vibration. If the sound of middle C is caused by 221 vibrations per second, the relative loudness of the tone depends, not upon a change in the *number* of vibrations, but upon their width. Pluck a violin string—say the thickest of the four. It will emit the sound of the tone G below middle C. Pluck it softly and the sound is soft; pluck it hard, and you can see that, although the pitch is the same, the string is vibrating across a wider space, like a pendulum that swings through a wider arc but takes the same time covering that wider arc that it takes in covering a narrower one.

The tone-quality of the voice, as of any other musical instrument, is determined by what are called overtones. The student of phonetics need not know as much about overtones as does the acoustician or even the well-informed musician. A nodding acquaintance, however, will prove useful.

Vibrations are never simple. Strings or vocal cords do not vibrate only in their entire length; neither does a column of air in a tube. Vibrating objects vibrate also in their parts, and these parts give out tones also. The tones are not so strong as the tone of the entire length; they are called *overtones*—tone given forth above or over the basic or fundamental tone. They are called also *upper partials,* because they are *upper* tones resulting from the vibrations of *parts,* not of wholes. Yet another name is *harmonics.* The quality of the human voice is complicated by the fact that it is magnified (much as the sounds of the strings are magnified by the hollow box of the violin) in the oral chamber, the inside of the mouth. The oral chamber, unlike the inside of a violin box, consists of many different materials: teeth, hard and soft palate, fleshy, moist insides of the cheeks. These materials are of varying degrees of hardness and of moisture, and the resonance (i. e., the *re*-sounding) therefore is complicated beyond that of the simpler resonance to be encountered in the ordinary musical instrument.

We can all sing or speak tones of a certain pitch; we can all

make them loud or soft; we can all make them last long or for a short period. Each of us, however, has a distinctly personal quality of voice, and this depends, among other things, upon our sex, our age, our oral chamber, and the peculiarity of our vocal cords, reeds, or lips.

The human voice has been reproduced mechanically. Sometime during the middle of January, 1938, Sir Richard Paget, whose gesture theory of language was considered in an earlier chapter, broadcast from London to the United States the speech of a mechanical apparatus. As reported in the magazine *Time*,[2] the apparatus was "largely a metal and fabric tube which has parts corresponding to the larynx, tongue and palate. He gets recognizable syllables by various arrangements of his hands on the mouthpieces. Air is furnished by a bellows which he operates with his foot." The instrument was made to say such sounds as "Oh, Lila, I love you," "Hello, London, are you there?" and "Minnie . . . father . . . upper . . . rather . . . ta-ta!" These words were pronounced in a "queer, blurred, atonal voice like that of a person who has been stone deaf since birth." Had Paget been able to reproduce exactly the physical conditions under which the human organs of speech do their work, the approximation to human speech would have been closer, but it would still have been far from perfect, since no instrument can duplicate the workings of the human mind and the emotions while speech is going on. Thus it must fail to capture the subtle effects of mind upon voice.

§ 2. CLASSIFICATION OF SOUNDS

Linguistic treatises intended for formal study give diagrams of the vocal mechanism, and go into such detail as one expects from a work on human anatomy. In a book of this nature, however, the anatomy of speech organs is less important than the constant awareness that the vocal lips, and the various organs coöperating with them in speech, make certain sounds in a certain way.

[2] Issue of January 24, 1938, p. 48.

What are these sounds? How are they made? And under what circumstances do they change? The answer to these questions includes much of the history of language.

Let me, at this point, urge a certain caution upon the reader. It may seem, at first blush, superfluous; yet it is of the utmost importance, and much havoc has been wrought in the history of linguistic investigation because even highly capable scholars have overlooked it or kept it imperfectly in mind. Phonetics, as the name indicates, deals with *sounds.* Not with *letters,* but with *sounds;* not with *spelling,* but with combinations of *sound.* Since the invention of writing—one of the epochal developments of the human intelligence—we have become increasingly a people of readers rather than talker-listeners; we have, that is, become script- and print-minded, rather than voice- and speech-minded. We say and write such things as that German *pf* (as in *Pflug,* 'plow') becomes, in English, *p,* as in *plow.* We are so dependent upon writing and printing for the conveying of information that we easily forget an essential fact: written symbols represent *sounds.* Written symbols are imperfect representations of sounds; all linguistic symbols are imperfect. A letter is no more a sound than a note, on paper, is a musical tone.

One of the great difficulties of teaching phonetics in print is that we have to employ silent symbols for live sounds. This is as hard as to teach music by the use of the printed page alone, without illustrations on the piano, the phonograph, or the radio.

Another difficulty is that phoneticians have not yet agreed upon a clear, unambiguous terminology.

How treacherous the written symbol may be to even great linguistic intelligences is shown by Jacob Grimm in the second edition of his *Deutsche Grammatik* (*German Grammar*). Here he writes that the German word *Schrift* ('writing'; our word *script),* contains *eight sounds!* How does Grimm obtain eight sounds from this seven-letter word? The letter *f* he counts as two, since *f* (or a sound resembling it) is expressed in Greek by *ph* (that is, by a symbol, *φ*, which we transliterate as *ph*).

Small wonder that one historian, transcribing such phonetics as this, labels the example an atrocity!

Sch is the German way of writing the sound that, in English, is represented by *sh*. As well say that *sh* consists of two sounds as to say that *sch* consists of three, because German happens to employ three characters. Or that French *ch,* which represents practically the same sound, consists of two sounds because it consists of two letters. Portuguese *nh,* as in the word *senhor,* is sounded like the Spanish *ñ*. In the case of Spanish the *tilde* over the *n* indicates palatalization; in the case of the Portuguese the *h* after *n* indicates precisely the same palatalization. Therefore, if we were to fall into Grimm's simplicity, we should have to say that the same sound consists of two elements in Portuguese and of one in Spanish.

Grimm, to be sure, lived in an age that was less enlightened, from the point of view of phonetics, than is our own. Analysis of speech-sounds is much better made on the basis of phonograph records, or from studies of vibrations as registered upon sensitized material by delicate apparatus: the *kymograph* (Greek *kyma,* 'wave'); the *sphygmograph* (Greek *sphygmós,* 'pulse'); X-ray; artificial palate to chart tongue-position. Here we are enabled to deal either with sound directly or with minute analysis of the vibrations causing specific sounds. Writing and print are, in this case, a necessary evil.

Vowels are classed according to the position of the tongue and lips when they are pronounced.

Consonants are classed according to the position of the tongue, lips, and other organs involved (i. e., teeth, gums, palate . . .)

In English, the vowels are *a, e, i, o, u.* There are semi-vowels (that is, sounds partaking of vocalic and consonantal character); these are *y, w, l* and the rolled *r.*

If you listen closely to your vowels, and are conscious of your mouth movements, you will observe that beginning with *a,* and with the mouth wide open, your mouth gradually closes as you progress through *e, i, o* and *u.* For this reason, the various types of *a* (for this letter represents a number of different

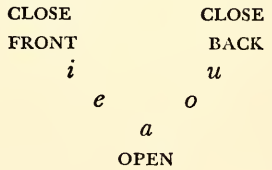
a-sounds) are called *open; i* and *u* are called *close;* the various shades of vowels between them are called *half-open* or *half-close.* The half-open are those nearer to *a* (as in *ah);* the half-close are those nearer to *i* (as in *machine*) and *u.*

Vowel sounds are further classified into *monophthongs, diphthongs* and even *triphthongs.* The *phthong* element in these words is from Greek *phthóggos,* 'sound' or 'voice.' *Mónos* is Greek for 'alone,' i. e., 'one'; *di* (*dis*) means 'twice'; *tri* relates to 'three.' A monophthong, then, is a vowel of single, simple sound. A diphthong has two sounds, and a triphthong, three.

Thus, our *y,* in *my,* though written as a single letter, is really composed of the elements *ah* and *ee.* It is a diphthong. The *oi* in *boil,* the *a* in *mate,* are diphthongs. The *ia* in *liar* is a triphthong, for it represents the sound *ah, ee* and a weak *a* in succession. *A* in *dale* is a diphthong; *ai* in *wait* likewise. *Miau* contains the triphthong *iau.* It is the sound, not the spelling, that decides.

If you will focus your attention now upon the part of the mouth where the vowels are formed, rather than upon the relative width of the opening, you will observe that some vowels are made at the front of the mouth, some in the middle, and others at the back. Generally speaking, *a, e* and *i* are *front* vowels; *o* and *u* are *back.* Certain types of *i* and *e* are *central.* This description, of course, is greatly simplified, but it emphasizes the important considerations that vowels are classified according to the width of the mouth opening (position of the lips) and the part of the mouth in which they originate (or, another way of describing the process, the position of the tongue).

An exceedingly simplified diagram—the so-called vowel triangle, might represent the classification of vowels in this manner:



The consonants are described and classified according to a more complicated system, because more organs are involved in sounding them. The names, however, once they are understood, are essentially simple.

Consonants are *voiced* or *unvoiced.* That is, they are made with or without the vibration of the vocal membranes. *P, t,* and *k* (which in this case stands also for hard *c* and *q*) are *unvoiced.* As you pronounce them, place your fingers lightly upon your Adam's apple, and you will feel no vibrations. *B, d, g* are voiced; your fingers, under the conditions of the little experiment just suggested, will feel vibration. Such sounds as *p, b, t, d, k, g,* are known as *stops* or *occlusives. Occlusive* is from Latin *occludere,* meaning 'to close' or 'shut,' or 'to stop.' (A *stopper* closes a bottle; to pronounce a *stop* or *occlusive* one must *close* or *stop* the mouth.) Occlusives or stops, as we have seen, may be voiced or unvoiced. Still another name for this group is *explosives,* or *plosives,* because of the airpuffs emitted during their utterance.

The opposite of the explosion, in the phonetic sense, is *implosion;* there are a few sounds that we make by drawing the breath inward rather than expelling it: the familiar *ts ts* to express sympathy or commiseration, the indrawn *ff* to express pain, the *oh!* of unbelieving horror or indignation. Language, however, is predominantly a matter of outbreathing; this is more comfortable, more transmissive. There are various terms also for *voiced* and *unvoiced* in this connection. *Voiceless, unvoiced* and *surd* are used to describe the same phonetic process. Another word for *voiced* is *sonant.*

Surd is from the Latin for 'silent' or 'deaf': *surdis.* It refers to lack of voice or lack of reason. In mathematics a *surd* is a quantity that cannot be expressed by "rational" numbers. Ab*surd*ity is contrariness to reason, and probably referred at first to inharmoniousness of sound. *Sonant,* describing a voiced sound, means 'sounding' (Latin *sonare*).

There are other consonants, however, than *voiced* or *voiceless* stops; there are the so-called *fricatives* or *spirants. Fricative* is from Latin *fricare,* 'to rub'; it is akin to the word

friction. Spirant is from Latin *spirare,* 'to breathe' or 'blow.' A *spirant* or *fricative* is a consonant that, unlike either the voiced or voiceless ones we have considered, may continue in utterance: *f, s, th.* Once you have pronounced a *p, t,* or *k* (*voiceless*) you are, so to speak, through with it; the same holds true for the *voiced* consonants (*b, d, g*). An *f, s,* or *th,* however, you can continue to pronounce as long as your breath holds out. This quality the spirants share with the vowels; for this reason, another name for fricatives and spirants is *continuants.*

The *affricate* (Latin *affricatus,* past participle of *affricare,* 'to rub against') is a combination of a stop and a spirant. It is not uncommon in English. It may be heard as an explanation of scorn: *Pf!,* or in the borrowed *Pfui!,* or in such combinations as *cupful.* German, in the phonemes *pf* and *z* (pronounced *ts*), has characteristic affricates: *Pfund,* 'pound'; *zehn,* 'ten.'

An *aspirate* (Latin *aspiratus,* 'breathed') is a sound that blends with, is preceded by, or followed by, an *h* sound. The Greek sound that is named *phi* and pronounced *f* is often transliterated as *ph;* that is why we have two spellings for such words as *fantasy* or *phantasy* (Greek *phaineien,* 'to show'; a *phantom* is an apparition, a thing that appears). Originally, the *p* and the *h* of the *ph* were sounded separately; they achieved their *f* sound by phonetic evolution. Our *wh* in *where* and *when* and *white* is an aspirated *w* which is losing the aspiration, now being frequently pronounced as a simple *w.*

As vowels have two descriptions, one for the part of the mouth in which they occur and the other for the relative width of the mouth in making them, so consonants have two descriptions: one for *the nature of the sound or soundlessness,* the other for *the organs involved.* Consonants are made, variously, by the teeth, the gums, the hard and the soft palate, the uvula, the lips.

A consonant made by both lips is called *bi-labial* because *bi* is Latin for 'two' and *labium* is Latin for 'lip.'

A consonant made by the lip and teeth is called *labio-*

dental because the Latin for 'tooth' is *dens, dentis; labium* we already know.

A consonant is called *palato-alveolar* because it is made by the palate and the gums. (Latin *palatum,* 'roof of the mouth,' and *alveolus,* "a small hollow'; this term is applied, among other things, to the teeth sockets, or the gum-ridge.)

A consonant is said to be *palatalized* when it is made against the palate, so that it acquires a *y* element. In Spanish *señor,* the *n* is palatalized; the sound of this *n,* in Spanish, is represented by the *tilde,* or curve over the letter *n;* in Portuguese the palatalization is indicated by an *h* after the *n: nh,* as in *senhor;* in Italian the same palatalization is indicated by *gn: signor.* The palatalized *l* is indicated in Spanish by *ll: Guillermo;* in Italian by *gli: Guglielmo;* in Portuguese by *lh: Guilherme.*

Velar consonants are so called from Latin *velum,* 'the soft palate.' *Velum* originally meant an 'awning' or a 'veil'; its application to the soft palate is a metaphor. The difference between the *palatum,* or 'hard palate,' and the *velum* may be felt with your finger, if you will run it along the roof of your mouth from front to rear. The velum is the further from the teeth. *Guttural* is another word for velar (Latin *guttur,* 'throat'), because these sounds were conceived as being made in the throat. *Velar,* or even *back* (adjective), is preferable because it is more scientific.

The term *cacuminal* is met. (Latin, *cacumen, cacuminis,* 'top.') It refers to consonants made with the tip or point of the tongue turned up and back. Another name for this is *cerebral,* from the notion that these were *head* sounds. *Cerebral,* however, is as unscientific as *guttural.* There are no *head* tones nor *chest* tones, for that matter. All voice passes through the glottis—the vocal cords.

L and *r* are classed as *liquids,* because they are vowel-like in their smoothness, their flowing nature. *L* is also called a *lateral* or *side* sound (Latin, *latus, lateris,* 'side') because the breath is emitted on both sides of the tongue when it is sounded, or at least on one side.

Some classifications include *m* and *n* among the liquids; the more usual grouping for these letters is as *nasals,* because, together with such a sound as *ng,* they are characterized by resonance in the nose.

The classifications of vowels and consonants that have been given in the preceding paragraphs are suggestive only; they represent but partially the complicated system that phoneticians have devised for classifying the sounds made by human beings in their respective languages. A single sound, vowel or consonant, may be regarded from so many different points of view—or, ought I say, points of hearing—that to classify it fully means the employment of many technical terms.

Any large dictionary contains a complete description of the sounds in language, grouping them as to the way in which they are produced, the organs coöperating in producing them, the position of the organs on the one hand and the action of the organs on the other, and so on into as many refinements as the ear and the instruments of phonetic research can detect.

My own feeling is that this, for the layman, is perhaps the last of the linguistic branches to consider with any degree of thoroughness. More important for him than a system of classification is a realization that sounds may change—that they may shift from one class to another—not by any magical process, but by a simple shift in the precise adjustment of the organs involved. In other words, shifts of sounds originate as shifts in mental and physical adjustment.

We have been dealing mainly with English sounds. The sounds that characterize a particular language are referred to, collectively, as the phonetic system of that particular language. Naturally, tables of vowels and consonants vary considerably for each tongue—far more, indeed, than one would imagine from looking at printed diagrams. The French *a* is not the English *a;* the French *d* is not the English *d,* nor is the German *d* either of the other *d*'s. Each language has its own subtle way of producing its sounds—its own phonetic system. We hear this well enough when we listen to a for-

eigner speaking his own tongue or attempting to speak ours. A knowledge of phonetics, by describing sounds to us in a scientific (that is, a closely observant) manner, helps us to appreciate more keenly the differences between one phonetic system and another. The more skilful adjustment of our speech organs enables us to imitate better the sounds in one system that are foreign to our own.

§ 3. LIVING LANGUAGE AND DEAD

Why do different peoples speak different tongues? Why do they have different phonetic systems? At first sight, or hearing, these questions would not seem to be related at all. The first of the questions we may leave for the nonce. The second is closer to our interests of the moment. For, if we attend sharply to the pronunciation of our own tongue, we discover that even inside of its boundaries there are many different pronunciations of the vowels and consonants. It is impossible to say, this is English, and its sounds are pronounced thus and so; this is German, and its sounds are pronounced thus and so. The vowels and consonants of American English are not those of London, though the languages are essentially both English. The phonetic system of Parisian French is not precisely the phonetic system of French as spoken in Canada, although each language is essentially French. Different vocalic and consonantal versions of one's own tongue may be heard without walking out of one's own residential district. Pronunciation, like language, and like truth in the proverb, changes in the mouths of honest men.

Why is this so? Perhaps the differences that begin in our own environment, without rendering our language unintelligible to us as we speak with our neighbors, are but a sample, on a much smaller scale and over a much smaller period, of the differences that finally result in distinct languages. Many an American audience, when first confronted by a group of actors from London, or by a lecturer from Scotland, has had an uncomfortable quarter of an hour adjusting

its ear to a definite shift in the phonetic system of what, presumably, was the same language. No doubt the Londoners, sitting before a group of American players, find a similar difficulty of adjustment, both as to vocabulary and phonetic system.

As to the general differences between peoples and their phonetic systems, there have been a number of explanations. We need not go too deeply into them; first, because they are somewhat hazy, and again, because we are more interested in the fact that they do exist. Certain very important deductions are possible from the differences and how they are related to one another historically and psychologically. In other words, we know that the differences exist; we have a notion as to how they have evolved. But whether one type of people is supposed to prefer this kind of vowel or consonant, and another type a different set, is not so sure.

For example, climate and environment have been named as the determining factors. Islanders, according to one theory, are supposed to prefer dentals, while mountain inhabitants prefer harsh throat-sounds. But how about mountaineers who live on islands? For there *are* mountainous islands. . . . Another theory suggests that the mixture of races results in phonetic alteration. A third seeks their source in the change of the speech-organs. A fourth seeks them rather in physiological changes taking place in the cerebrum—i.e., ultimately in psychological adjustments.

As with theories concerning the origin of language itself, we approach closer to the truth, perhaps, by a fusion of the various opinions. Certainly climate and environment, which affect other human traits so markedly, must have an influence upon enunciation, upon style and speed of delivery, upon the conditions in which linguistic exchange takes place. Whether it can be proved that islanders actually favor sounds created in the forward part of the mouth, and mountaineers favor sounds created near the throat, is another matter.

Certainly, too, racial mixture must result in types of phonetic change; precisely what the nature of the change may

be, is again another matter. Racial mixture accounts—though not alone—for changes in physical structure and in mental outlook; how then can it help determining, if only subtly, certain phonetic changes?

Surely, whatever it is that changes organs of the body is bound to have its effect upon what those organs do. The organs that collaborate to produce speech are many; besides, no organ acts of itself, without relation to the rest of the organism.

The tendency, of late, has been to assign all changes basically to the mind—to alterations in the structure of the cerebrum. Criticizing the theory that linguistic change is caused by changes in the organs of speech, Pedersen wittily remarks that "this is quite as absurd as to explain the evolution of the dance as due to changes in the leg muscles. Sound changes . . . are of psychological origin. . . ." [3] To this some might reply that it is a difficult matter to draw a hard and fast line between psychology and physiology. There must be a body for the mind to work upon, and a mind to work upon the body.

For the present we must be content with this: there is, there has always been, and there always will be, linguistic change. Ultimately such change, beginning at a specific moment in the history of a language, and with seemingly innocent deviations from the current standard of pronunciation, may lead to the evolution of a language that could not be understood by the speakers of the tongue from which the new language evolved.

Such change goes on constantly, not only in the sounds of speech but in the meanings of words, in the functions of grammatical forms, in the number of words. Meanings change; grammar changes; the vocabulary changes; the sounds of the language change. All is change; nothing in language stands still, until a particular language is no longer spoken. Then it is what we call "dead." Classical Latin, classical

[3] Holgar Pedersen, *Linguistic Science in the Nineteenth Century* (Harvard University Press, 1931), p. 297.

Greek, classical Sanskrit, are dead languages. They exist now only in records. They no longer change in sound, vocabulary, grammar, or meaning, because they are no longer in the mouths of living people, used for the purposes of living.

There is a true sense, however, in which Latin and Greek and Sanskrit (and other tongues no longer spoken) never died.

They were, in the course of time, transformed. French, Italian, Spanish, Rumanian, Provençal, Portuguese, and many lesser dialects are the *living continuation* of the Latin that was spoken by the common people. If we had no written or engraved records to preserve the tongues from which modern languages are descended, we should not know what a "dead" language was. These records fix the state of a language at a certain epoch in the past, and enable us to compare the old language with the newer tongues that may be traced back to it.

Language is always dying; it is always being reborn. A specific language may "die"; that is, it may cease to be spoken in a certain definite system of speech-sounds, word-meanings, grammatical forms, and vocabulary. It lives on, however, in the system that has grown out of it. *People have never ceased talking it.* There comes a time when so many changes have occurred that there is a distinct difference between the old tongue and the newly evolved one. While the essential changes were going on, nobody realized that a new tongue was being shaped from the old. Such changes are too gradual; we notice only a symptom here and there. Another way of stating the general proposition is this: *Languages die; language is immortal.*

If we watch closely the forces that make for change in our own daily speech, we shall obtain a better conception of the changes that lead, ultimately, to the formation of different tongues out of a single parent-tongue. Latin, as we have seen, broke up finally into a number of languages that are not understood reciprocally: the Frenchman does not, without study, understand the Spaniard or the Rumanian; neither

do these others understand the Frenchman or each other. English, Dutch, German, Danish and Swedish have, in the dim past, a common ancestor, yet they are independent languages to-day, requiring, if one member is to understand another, special study. Evidences of the relationship abound; they have evolved too far from one another, however, to remain mutually comprehensible.

Since words and phrases are *articulate* sounds (that is, jointed, distinctly spoken) they have accented and unaccented parts. Accent, or stress, is in fact a feature of the articulation. *Gésture* is accented on the first syllable; *gesticulátion* is accented on the fourth; *gesticulative* is accented on the second. Return a moment to *gestic'ula"tion.* Long words have primary and secondary accents. The chief accent of this word is, as we have said, on the fourth syllable; but there is a lesser accent on the syllable *tic.*

Words, too, like Aristotelian plots, have beginnings, middles, and ends. That is, the vowels and consonants that comprise them have initial, medial, and final position.

Accent and position are very important in the history of sound changes. Unaccented syllables, unless there are counteractive influences, tend to weaken or disappear. Accented syllables tend to remain, sometimes undergoing alteration. Final syllables tend, unless accented, to be pronounced weakly and sometimes to vanish even before they have disappeared from spelling.

Thus the Latin accusative consonant *m,* in such endings as *rosam* (rose), *puerum* (boy) had already weakened in classical speech. Since most nouns in Romance languages come from the accusative cases of the people's Latin, this *m* does not appear in French *rose,* Spanish *rosa.*

As for accents, they undergo shifts, even as sounds do. Take such a word as the hitherto unfamiliar *quintuplets.* The people at once pronounced the word *quintúplets,* with the accent on the *u* instead of on the *i;* for most, the Dionne sisters will remain *quintúplets.* The word is somewhat unwieldy, not because it has many syllables: they are only

three, though it sounds and looks as if there were more. It is manifestly foreign; the *nt* and the *pl* cause a slight hesitation because they threaten to jumble the consonants, especially with the final *ts* in sight. (Try saying the word rapidly, and see what happens.) It suggests *triplets,* where the accent is on the second-last syllable. If it suggests *quadruplets,* it suggests another mispronunciation, with the accent on the *u* instead of on the *a.* The popular accentuation of *quintuplets,* then, becomes, by analogy with *triplets,* and through a certain phonetic convenience, changed from the standard.

Such a change often persists. If classical Latin *cáthedra* hadn't shifted to *cathédra,* in popular speech, the modern Portuguese would not have the pronunciation *cadéira* for their word meaning 'chair.' Peculiarly, the original Greek *kathédra,* which gave the word to Latin, was accented on the *e.* Such words as Spanish *libertad* and Italian *libertà* and French *liberté* are accented on the final syllable. But the Latin *libertátem* accusative of *libertas* (liberty) was accented on the second-last syllable. The ending *em,* containing the weak final *m* of which we spoke above, considering such words as *rosam* and *puerum,* disappeared; the accent, however, remained where it had always been.

There are technical names for words having accented last, second-last, and third-last syllables. The word with accented final syllable is called the *oxytone* (Greek *óxus,* 'sharp'; and *tónos,* 'tone'). *Oxus* appears in *oxygen;* that is, sharp or acid matter; the *gen* element is related to the root of *gignesthai,* 'to be born,' and is found in *eugenics*—'good birth.'

The word with accent on the syllable before the last is called *paroxytone.* (Greek *pará,* 'alongside of.')

The word with the accent on the second syllable from the last is called a *proparoxytone.* (Greek *pro,* 'before,' 'in front of.')

Finally, the syllables themselves are named from their position: the *ultima* is the last (Latin *ultimus,* 'last'; an *ultimatum* is a final warning). The second-last is the *penultima,*

or, as abbreviated, the *penult* (Latin *pæne,* 'almost'). The third-last is the *antepenult* (Latin *ante,* 'before').

These definitions may sound too Greek and too Latin, and it would not be impossible to fashion a more English nomenclature. They alienate too many students, unnecessarily. In certain branches of linguistic study, however, they are highly useful terms; even such an unwieldy customer as *proparoxytone* is preferable to repeating "word with accent on the third-last syllable."

How inadequate our spelling is may be glimpsed from a consideration of the *k* sounds in such words, respectively, as *can, keen, kin, cote, coo.* As sounds occur in combination, they affect one another. The *c* in *can* is affected by the fact that the vowel next to it is *a,* a front vowel; this carries the point at which the *c* is made further forward in the mouth than it would be if pronouncing the word *call.* For the sound of *a* in *call* is made further back in the mouth than the sound of *a* in *can.* In each of these cases, then, the *k* sound is affected by the position of the following vowel.

Take the ordinary, unselfconscious pronunciation of such words as *matter.* If you watch yourself, you may find that you often say, actually, *madder.* Careless pronunciation makes *beaudiful* of *beautiful.* That is, the voiceless *t's* becomes voiced into *d's.* This is because they are inter-vocalic—between vowels. The vowels are voiced; with a vowel in front of the *t* and a vowel in back, we are mentally and physically adjusted for voicing; we have a tendency, then, to carry the voicing through the entire combination, into the unvoiced consonant.

It is of such a delicate imbalance between mind and body —between psychology and physiology—that sound changes are largely made. According to one of the newer philologists, George Kingsley Zipf, in a book, *The Psycho-Biology of Language,* phonetic changes are motivated by a double principle of economy and equilibrium. Neither his conceptions nor his explanations are for beginners, but it is not at all

unlikely that his work in what he has labelled *dynamic philology* will effect important alterations in our attitude toward the theory of phonetics in its numerous departments.[4]

[4] Mr. Zipf's book, published in 1935, appears to me to be a work of significance. It is not for beginners, as I say; yet its results, as distinguished from the methods and theories by which they are attained, may in summary suggest profitable thinking to linguistic students. Some of these results I shall consider in succeeding chapters.

CHAPTER X

HOW SOUNDS CHANGE—AND PERHAPS WHY

> The English have no respect for their language, and will not teach their children to speak it. They spell it so abominably that no man can teach himself what it sounds like. It is impossible for an Englishman to open his mouth without making some other Englishman hate or despise him. German and Spanish are accessible to foreigners; English is not accessible even to Englishmen. The reformer England needs to-day is an energetic phonetic enthusiast; that is why I have made such a one the hero of a popular play.
>
> GEORGE BERNARD SHAW, in the Preface to *Pygmalion.*

> A large part of the permanent historical transformations of language are of the same types as the changes effected by rapid utterance. PILLSBURY AND MEADER, in *The Psychology of Language.*

§ 1. PHONETIC DEVIATION

LET US NOW, WITHOUT AS YET TRYING TO DISCOVER ANY "laws" of change, look and listen about us for evidences of phonetic deviation from the current standard of English speech.

We readily notice that children have phonetic difficulties; they say *tweet* for *sweet; muvver, bruvver* and *uvver* for *mother, brother* and *other; tum* for *come; troof* and *bahf* for *truth* and *bath;* even lisping has been referred, in certain instances, to the persistence of bad speech habits begun with defective hearing. "Very few cases," says Sturtevant, and medical science will bear him out, "are due to physical defects." [1]

Hawaiian cannot distinguish between *k* and *t* or *g;* or between *d, e* and *r.* Mohawk has no *p, b, m, f, v,* or *w.* Lip-articulation is absent. Chinese has no *d* or *r.* English lacks

[1] E. H. Sturtevant, *Linguistic Change,* p. 36.

the sound of German and Scotch *ch;* hence Englishmen's *Ik* for German *ich* (I).

We are sensitive to dialect pronunciations: *gal* for *girl, idea* for *idéa, goil* and *oil* for *girl* and *earl.* In a metropolis such as New York we hear English as worked-over upon the tongues of almost every people of the earth. The German's *vonderfull* for *wonderful,* the Swede's *yumping Yimminy* for *Jumping Jiminy,* the Chinese *'Melican* for *American,* are practical initiations in phonetics.

Indeed, some of our children's imperfect enunciations we recognize as those of foreigners learning the English language. It has often struck me that we can learn much about our own language, as well as about a foreign language, by listening carefully to the mistakes committed by the foreigner in speaking our tongue. We are made aware, as no mere printed page can make us aware, of the difference in phonetic systems. The Frenchman's *zis* and *zat* for *this* and *that,* the Russian's *tink* and *Teodore* and *troot* for *think* and *Theodore* and *truth,* the Continental I *weel* for I *will*—these soon impress us, without any formal study of phonetics, with the fact that certain languages do not have our *th* sounds, whether soft or hard; that their *i's* are close vowels, not the open *i* in our *pin.*

We are forever hearing ourselves and others say *didja* for *did you, wanna* for *want to, gimme* for *give me, sha'n't* for *shall not, it's* for *it is, who's* for *who is.* I have heard *cou'n't* for *could not.*

We often hear ourselves or others make a slip of the tongue. We anticipate a certain sound, or we transpose two sounds, or some of the sounds in a group of words affect other sounds. We say *paster noster* for *pater noster,* the *s* of *noster* being anticipated and intruding itself into *pater;* or we intend to say, "spring chicken, ten cents a pound," and find ourselves saying "spring *ticken,* ten cents a pound," the *t* of ten being anticipated. The Spaniard says *peligro* for *peril,* whereas the Latin was *periculum;* the *l* and the *r* have been transposed. The Frenchman says *trésor* for *treas-*

ure, which in the Latin etymon was *thesaurum;* another *r* has been imported here. (We have taken over the word bodily in our *thesaurus*—a word treasury). We still hear, in English, I *ax* you i. e., I *aks* you) for I *ask* you, and the former pronunciation was once less reprehensible than it is now.

We are forever catching ourselves and others in careless pronunciations, such as *lib'ry* for *library,* or *prob'ly* for *probably;* we slur such endings as *-ing* in *going, coming,* and so on.

We notice all these things, attribute them to haste, carelessness, or economy, and forget them, because we so manifestly know better. Yet it is just such haste, carelessness, economy, or whatever else we shall decide to call it, that is at the root of much phonetic change, and that explains in appreciable measure the evolution of one language from another.

Oertel and others after him have adopted, for phonetic alterations within a specific language, two general classifications: *primary change* and *secondary change.* Primary change is that originating in an individual; it is active and conscious. Secondary change is passive; it is an adopted change, is imitative and largely unconscious. "In many changes," says Oertel, "acceptance and rejection do not rest upon the character of the change itself at all, but upon the external social considerations which have no inherent or necessary connection with the change. This is the reason why all attempts to explain the survival and spread of linguistic changes on a purely linguistic basis must fail." [2]

§ 2. PYGMALION AND A FLOWER-GIRL

We are too familiar with the school-girl type who, having discovered a new "crush," whether on the stage, in the movies, or at school, at once effects a radical change in her pronunciation of certain words. Great public figures, such as kings and presidents, may have just such an effect upon a small or large section of the population. To-day, the talking pic-

[2] Hanns Oertel, *Lectures on the Study of Language,* p. 144.

tures are playing an important phonetic rôle. Teddy Roosevelt made the fortune of the word *strenuous;* a book by a minister popularized the phrase *the simple life.*

When Teddy Roosevelt used the word *strenuous,* that represented a primary change; when the public adopted it, that was a secondary change.

All who have seen or read the play *Pygmalion,* by George Bernard Shaw, will recall the essential rôle played in that piece by so seemingly dull and uninspired a subject as phonetics. Who but Shaw, indeed, would have had the paradoxical notion of discovering, in the science of speech-sounds, in a phonetician and a flower-girl, a topic for romance and social satire? Yet the tale of the flower-girl who rose to the heights of social distinction because a professor of phonetics taught her to repeat, parrot-wise, an inane sentence about the weather, contains wise and human observation. For only too often not what is said but how it is said creates the favorable impression sought by most speakers. Much of this effect is to be attributed to quality of voice; it is, then, additional evidence of the powerful musical element that has remained in speech. Not a little of it, however, is distinctly phonetic in nature. A certain pronunciation becomes associated with a certain social level; it thus acquires a social significance, indicating—at least in the minds of those who attach importance to such phonetic peculiarities—a relative height or depth of social values.

In the case of Shaw's flower-girl, it was the accent and enunciation that, coupled with the affected vocabulary, brought about the acceptance of this lowly creature by her social superiors. You see, said Shaw, virtually, you have erected a structure of personal and social distinctions. What is the true basis of these distinctions? Is it fundamental human value? Is it something inalienable, untransferable, inborn, that marks the social superior unmistakably apart from the rest of humanity? No. It is nothing more important than an accumulation of small talk, a trick with vowels and consonants, and a vocal air of intonation. With the justice of the play-

wright's implications we are not at the moment occupied; what concerns us is that Shaw, on the purely phonetic basis, makes out a case that may be more than plausible, although it is certainly less than the whole truth.

That one's pronunciation—one's phonetic system—is an audible labeling of one's regional origin, is familiar to almost everyone who listens with an ear half-cocked to speech. The trained phonetician can tell—as Shaw's professor did—not only the difference between one dialect and another, but the more particular zone of a special dialect to which the speaker belongs.

There have been critical moments in the history of humanity when a dialectic pronunciation betrayed the speaker even as an enemy uniform could have betrayed him. On the night of those Sicilian Vespers that Verdi used as the basis for one of his earlier operas the French fugitives were ordered by the Italians to say *ciciri.* The sword was at their throats to witness their self-betrayal. In Italian, this combination is pronounced *chichiri: c* before *i* or *e* in Italian is regularly pronounced like English *ch.* A Frenchman, however, would naturally pronounce *c* before *e* or *i* with the sound of *s,* just as we do. *Ciciri,* on the French lips, became *sisiri,* and *sisiri* pronounced the speaker's sentence of death.

Isaac Taylor, in his book *The Origin of the Aryans,* tells us that "when the Mamelukes in Egypt exterminated the Arabs of the Saïd they made them say the word *dakiki* (flour), in order to ascertain whether the guttural was pronounced as a *k* or a *g.*"

The most famous instance of such a use for phonetics is to be found in the Bible, Judges XII, 6, wherein is recounted the conflict between the men of Gilead and the men of Ephraim. The test word in this case was *shibboleth,* which the men of Ephraim "could not frame to pronounce it right," and said Sibboleth. Whereupon they were slain at the fords of Jordan. The meaning of *shibboleth* is (Hebrew) 'an ear of corn,' 'a stream,' or 'a flood.' Because of this Biblical episode, however, it has come to mean, in English, any verbal

distinction between members of contending parties—a test, watchword, or peculiarity of speech.

Oertel quotes from De Vere the tale of a similar encounter at another stream. "A ferryman [during the troubles in Kansas] placed a cow at the bank of a river, and on the arrival of a customer was wont to inquire, 'whether he saw that thar brute and what he mought call her?' If the applicant 'reckoned' it was a 'cow,' he could go on his way rejoicing, but if (betraying his New England origin) he should 'guess' it to be a 'keow,' he must needs seek some other crossing-place." [3] The distinction here, of course, was verbal, lexical, not phonetic; but it was based upon practical linguistics none the less.

From my own boyhood I recall what may be regarded as an unintentional parody upon the destruction wrought at the fords of Jordan. It was a habit of Jewish children, upon making acquaintance in neighborhoods new to them, to inquire of one another, "What do you say, *pitter* or *putter?*" (The second of these pronunciations of the Yiddish word for *butter* almost rhymes with *footer.*) The answer *pitter* would stamp the child as of Russian-Jewish parentage, whereas the answer *putter* would stamp him as of Lithuanian-Jewish parentage. And when *putter-ite* met *pitter-ite,* it was the signal for a war of innocent, unaware phoneticians!

"Surely," said they that stood by, to Peter (Matthew xxvi, 73) "thou also art one of them; for thy speech bewrayeth thee."

Had the enemy, during the Sicilian Vespers, been Castilian instead of French, he would have betrayed himself quite as effectually. For he would have pronounced *ciciri* as *thithiri.* A South American of the Spanish-speaking countries on that continent would have pronounced the shibboleth much as the unfortunate Frenchman did: *sisiri,* since South American Spanish, except when self-consciously Castilian in pronunciation, makes a sibilant of the lisp.

There is a story that the Castilian (that is, standard Spanish) lisp of the *c* before *e* or *i* goes back to the court's imita-

[3] Oertel, *op. cit.,* p. 109.

tion of one of the kings who lisped. It is plausible, but not true. It is plausible because the sycophancy of courtiers extends from physical subservience to more subtle flattery. The bad habit of a ruler is not something to be corrected, but rather to be imitated. There have been kings who demanded a "royal road" to learning; there have been emperors who considered themselves above the rules of grammars. Beyond doubt there have been royal mispronunciations that were taken up by the court, just as royal misdeeds have been taken up.

The trouble with the theory of the royal lisp is that *c* before *e* and *i* shows, in the evolution of the Romance languages, a special development, characteristic of the particular language that has arisen from the people's Latin. In Italian a *c* so placed is pronounced like our *ch: cento,* a hundred, sounds like the imaginary English word *chento.* In French, a *c* so placed sounds like English *s; cent,* a hundred, is pronounced (with an *o* somewhat like *o* in English *song*) *son,* with the *o* nasalized. (The old practice of using *ng* to represent in English transliteration the French nasalization is bad; it is altogether misleading.) In English, a *c* so placed is pronounced *s;* so it is, as we have seen, in Spanish-American. In German, for like combinations, we get the sound *ts.* Did the French, then, also have a king who lisped in his own French way? Or, rather, hissed? Did the Spanish-American dictators, too, suffer a like defect of speech? Was a certain German potentate, or an English king, or an early American president, afflicted with an inherent inability to manage the *c* before *e* or *i?* The widespread peculiarity of a *c* so placed suggests, rather, the working of a phonetic law. The law (as laws are interpreted in the study of speech) works differently among different peoples and in different regions.

A closer attention to language reveals suggestive correspondences between one tongue and another. One does not, after all, have to be a deep student of linguistics to notice, as one reads, that English *cy,* as in *democracy,* is represented

in French by *tie* (*démocratie*) or in Spanish by *cia* (*democracia*); that the ending *-tion,* as in *attention,* is represented by the same spelling (but not the same sound) in French, by *ción* in Spanish, by *zione* in Italian. German *pf,* in much the same casual way, is noticed to correspond to *p* in English: *Pfund,* 'pound'; *Apfel,* 'apple.' The general reader, through numerous half-observances such as these, acquires a feeling that languages are interrelated.

Later we shall hear not a little about linguistic "laws." They are not laws peculiar to language; they are evidence of the same principles that are at work upon every other phase of the individual or social life.

§ 3. LAZINESS, DECAY, OR SPEED?

Many books upon language, when they come to the consideration of change in words, make use, as a partial explanation, of the term "laziness." The Greek word *eleemosyné,* for example, from the word *eleós,* meaning 'compassion,' is the parent of our word *eleemosynary,* which is an adjective describing an activity or feeling that has to do with charity. A charitable institution is also an eleemosynary institution. The word, to most English speakers and readers, remains Greek. They would be surprised, and perhaps amused, to learn that our common word *alms* is a direct descendant of *eleemosyne.* So short a word for so long a one! So common a word for one so uncommon! The Spanish word *limosna,* meaning 'alms' also, is likewise descended from the Greek; in length, it is intermediate. In Middle English, *alms* was *almes,* or *almesse;* in Anglo-Saxon it was *ælmysse.* A comparison of the original form with the later ones that developed into the present brief vocable suggests that successive generations, confronted with such unwieldy formations, allowed laziness to overcome them, until the word assumed a reasonable sound-shape.

It is true, of course, that many—perhaps most—speakers are lazy; that speech, predominantly a tool, an implement, a

utility, seeks the shortest cut to its object. A term met as frequently as "laziness" is "decay." Decay suggests the degeneration, the rotting away, of a form or a material. Neither term is satisfactory to the more scientific student. I prefer, by far, with necessary and important qualifications, such a designation as "economy." "Laziness" carries certain moralistic overtones that are out of place in a scientific investigation. "Decay" carries certain overtones suggestive of vegetative process. *Decay* (Latin *de-cadere,* 'to fall away') and *laziness* (akin, curiously enough, to Anglo-Saxon *lysu,* 'corrupt') suggest alike a certain negativity. *Economy,* on the other hand, has a positive ring, without the suggestion of moral defect or of material degeneration.

There is no special virtue in long words as such; there is no special vice in short words as such. Nor, for that matter, is there any special virtue in short words, or any special vice in long. Terms such as "laziness" and "decay" seem to place a premium upon the original forms and lengths of words, and to imply that later forms, if shorter, represent a lesser, a degraded descendant of a noble original.

This is not so. Often the briefer form, whether by this we mean a single word or a grammatical formula, represents a finer adaptation to the purposes of language. It is an economical development just as truly as in the successive simplifications affected in a machine—certain parts of a printing-press, an automobile, a tractor—the newer, more adaptable model is an economical development. Words, like mechanisms, may be "stream-lined." The King's scepter was once a rough club; the first locomotive funnel was a clumsy, giraffe-like structure compared with the short-necked funnel of the crack express-train to-day; even in those cases where the instrument itself has become larger and more complex, the separate parts show a finer adaptation to purpose.

It is little different, essentially, with words and those formulas constructed of words. It is not only, perhaps not chiefly, laziness that is responsible for the virtual disappearance of the subjunctive in English, or for the word *alms.* If it were

laziness, we should not have, side by side with the shortening of some forms and words, the lengthening of others. As for "decay," it is at best, as applied to linguistic process, an unscientific metaphor.

The principle of economy is to be observed in operation throughout the mental functioning of man, and not of man only. The longer man employed language, the more expert he became in its management. The word *mob* is derived from the Latin phrase *mobile vulgus,* 'the easily movable crowd.' *Móbile* (pronounced in the three syllables) is Italian for *fickle,* as in the famous aria from Verdi's *Rigoletto:* "La donna è mobile" (Woman is fickle). The same Latin adjective provides the French word for furniture: *meubles,* which is to say movable property as distinguished from real estate or immovable property. Such varied application of a root-idea is in itself an illustration of yet another type of economy; but of that, much more in another place. Our word *mob,* then, represents the irreducible minimum of *mobile vulgus,* just as our word *bus* represents the irreducible minimum of what once was Latin (and later English) *omnibus,* the dative plural of *omnis,* 'all' or 'everybody,' signifying a conveyance *for everybody.* As soon as *bus* became generally understood to mean *omnibus,* as soon as *mob* became generally understood to mean *mobile vulgus,* the longer forms were no longer necessary.

For no other reason, when language became sufficiently clear to be able to dispense with elaborate gesturing, did gesture as a primary system of communication become obsolete. Two signs are one too many when one sign suffices. The hand has other employments than as an adjunct to speech. It is not laziness, nor is it decay, to release an unneeded limb from one task so that with finer skill it may perform another.

I know, of course, that it is now a commonplace of linguistics to examine very suspiciously any explanation of phonetic change that adduces as reason the desire for economy, or the objection to difficult combinations of sound. The

theory that relative speed of utterance accounts for changes formerly attributed to "laziness" and "desire to avoid difficult combinations" has established itself firmly. It is more scientific than the previous theories because it lends itself to corroboration by experimental method. Speed of utterance has been measured. It is hard to measure "laziness" or "economy in pronunciation" or "desire to avoid difficult combinations." It is true, moreover, that combinations in a foreign tongue striking us as difficult have no difficulty for the native. Recall the story of the Pole, to whom an Englishman objected that Polish was too full of consonants. Whereupon the Pole retorted, "And how about your word *strength? Seven* consonants to *one* vowel!" The retort loses little point from the fact that the Pole counted the *printed* consonants (*th* as two consonants) rather than the *sounded* ones.

As a matter of fact, entire sentences are possible without any vowel at all. Pedersen quotes Czech: *strc prst skrz krk,* "stick your finger through your neck." [4] Whether this is quite as consonantal as it looks I cannot say. The moral is plain, however: the matter of "difficulty" is largely subjective, and also a matter of habituation.

Teasing tongue-twisters such as "Peter Piper picked a peck of pickled peppers" or "Sister Susie's sewing shirts for soldiers" have their sober aspect. They reveal, in jesting fashion, a phonetic state of affairs that receives serious attention, too. The second of the examples, in its tricky combination of *s* and *sh* sounds, which traps so many into saying "sholdiers," has its analogues in sober prose. The more careful writer, who hears as well as sees what he writes, avoids such phonetic snares.

While it is true that all the sounds used in human speech—clicks, gutturals, cacuminals, as well as the more familiar varieties of vowels and consonants—can be made by any people, with a little practice, it is also true that certain peoples avoid certain combinations. Languages seem to have certain phonetic predispositions, or diatheses. For this, the reason can-

[4] Holgar Pedersen, *Linguistic Science in the Nineteenth Century,* p. 285.

not be *only* physical, or *only* psychological. Nor can it be *only* a change in the speed of utterance. In other words, reasons for change are as complicated as the sounds themselves. To think that a single explanation explains is quite as ingenuous as to imagine that the written alphabet of any language gives any but the most schematic notion of what the sounds are to which they refer.

So that general acceptance of the "speed" theory should not obscure the fact that subjective attitudes determine many human actions. I cannot believe that human beings, dealing with language, are any different from what they are in the other activities that make up living. They do, often obviously, try to avoid needless effort in speech, as in other things.

When we call a man *Ned* instead of *Edward,* it is because the constant repetition of his full name would become wearisome. Shortened names such as this are not the result of pure phonetic process; they are a conscious saving of time. If we call a child *Eddie,* there is, in the altered name, a distinct element of affection and familiarity; the shortening is not the result of phonetic process. *Bill* for *William, Joe* for *Joseph,* are similar cases. The student mentions so often the names of his subjects that it is a waste of time to keep repeating *mathematics, economics;* he says *math* and *ec.* For *examination* and *laboratory* he says *exam* and *lab.* It has been suggested that in such shortenings there is a humorous or even derogatory element. Perhaps. The primary element, I am sure, is economy. When house-painters ask for the *turps* when they want their *turpentine,* it is not because they are in a humorous or scornful mood, necessarily, but because they wish—like most human beings, including students—to save time, to avoid the monotony of a repetition that is not required to make their meaning clear.

Certain formations unquestionably have their origin in this human desire. *Rep* for *reputation* is clearly in this category; so is the more familiar *demirep* for an adventuress or a woman of dubious habits. Why only a woman? Is there evi-

dence here of a world dominated by masculine standards? So, too, *demi-monde* (a word supposed to have been introduced by the younger Dumas, in the play of that name produced in 1855) refers chiefly to those women of the "half-world" who form a class apart from their more conventional sisters. *Rep* and *demirep* are conscious contractions, formed not by phonetic law but by the readiness of mankind to use a minimum of breath for communication. So is *deb* for *debutante,* or *reb* for *rebel* (noun), or *U. S.* for *United States.* Slang terms, such as a *rec* for recognition ("She didn't give me a rec"), often have just this basis, sometimes not without a certain phonetic playfulness. A few years ago common words ending in *tion* (*ambition, disposition*) were being pronounced and sung in popular ditties as *ambish, disposish.*

So, too, our verb *canter* could not possibly have evolved, phonetically, from the phrase *Canterbury gallop.* Neither could the word *tar* (sailor) have come, phonetically, from *tarpaulin.* Whereas such forms as *'backy* for *tobacco,* and *'varsity* for *university,* may be regarded as resulting from the disappearance of an unaccented syllable, *mob* and *bus* and *canter* and *rep* and *tar* are obviously shortenings meant to save time. So are *movies* (from *moving-pictures*); *talkies* (from *talking-pictures*); *funnies* (from *funny papers,* or *comics,* i. e., *funny sections* of the newspaper).

Take the case of the Spanish *Usted,* which is a contraction of *vuestra merced,* your grace. From this significance it has been weakened to that of polite *you,* taking the third person singular, just as does the German *Sie. Habla Vd. español?* (*Vd.* is the abbreviation for *Usted*) means simply, "Do you speak Spanish?"

How does so long an expression as *vuestra merced* become *Usted?* How does so long an expression as *God be with you* become *good-bye?* Certainly phonetic process is here at work. Phrases of this sort are of extremely common occurrence; they naturally tend to be slurred, because they can be understood without being pronounced in full. They occur in un-

accented positions, and thus are further subjected to the fate of unaccented sounds.

Does this mean, however, that only phonetic considerations (in the narrower sense of the adjective) have applied? We tend to abbreviate such polite formulas for the same reason that we abbreviate them in writing. The Spaniard sets down *Vd.* for *Usted* because he feels that there is no sense in writing out in full a word so frequently employed. It would be a waste of time and paper. We do the same, even more regularly, with the word *Mister,* which looks positively awkward, so universal has become the abbreviation, *Mr.* Pedersen goes so far as to see, in such curtailments as *Usted,* a symbol of our human bipolarity toward politeness; we devise rules and then treat them lightly. This is not at all impossible as one of the more remote causes for such contractions. Fundamentally, the process is phonetic, especially if—as we should—we use that word in a larger sense that embraces psychology as well as physiology.

All change in pronunciation begins in the mind and the mouth of an individual. The child mispronounces because it has heard incorrectly, or because its organs are not under perfect control. The child, after all, hears speech with an imperfect mind and an imperfect muscular coördination. Its ear is not centered, with scientific interest, upon every sound that it hears. Serviceable approximation is for it, as indeed for most of its elders, good enough. We mispronounce, too, because we anticipate sounds, because we mix sounds up, because we leave them out, because we blend them, because they suggest similar combinations, because we are in a hurry, because we can get along with something less than distinctness.

These changes are not accidental; they are not capricious. "The real causes," writes Oertel, "which bring about those phonetic changes which are usually explained as being due to economy of effort are change of speed, which interferes with the proper coördination of movements, and avoidance of unusual combinations, not because they are hard in them-

selves, but because they are unusual, our muscles being trained for a difficult and narrowly circumscribed set of movements." [5]

A question suggests itself: Is not speed a form, a phase, of economy?

Jespersen considers the matter from the psychological point of view. "People do not pronounce distinctly unless they feel that distinctness is necessary if they are to be understood; whatever is easily understood from the context is either slurred over or left out completely." [6]

It will be noticed that Oertel adduces not *speed* but *change of speed* as one of the chief causes of linguistic alteration. If, for any cause, we speed up our pronunciation, sounds are likely to fall out, or to coalesce with other sounds. If these sounds are in unaccented syllables, the likelihood is all the greater. The original Latin word for *stipend* was *stipipendium;* it became *stipendium* through loss of the reduplicated *pi;* the original Latin for nurse was *nutritrix,* which became *nutrix* in the same way—that is, by dropping the reduplicated *tri.* Our word *simply* was in its earlier form *simplely;* the reduplicated syllable has disappeared. *Humbly* was formerly *humblely. Supposititious* (i. e., hypothetical, or fraudulent) lost the extra *it* and became *suppositious;* the first form is still favored, but this may be because the word is never in the popular mouth. *Interpretative* is giving way to *interpretive,* which drops the almost reduplicative syllable *at.* We say *England* because, to our ancestors, *Englaland* seemed to be burdened with an extra *la; honesty* should be, if we followed the French model (*honnêteté*), *honestety; idolatry* should be *idololatry*—the worship of idols; *Worcester* and *Gloucester* are pronounced as if the *es* before *ter* were not there. In such a word as Dorchester the full pronunciation is saved by the fact that the *ch* is there, preventing the close proximity of two *s* sounds. More familiar are *prob'ly* for *probably; lit'ry* for *literary; temp'ry* for *temporary.* This special type of phonetic change has been christened *haplology* (*haplóos,*

[5] Oertel, *op. cit.,* p. 205.

[6] Otto Jespersen, *Progress in Language* (Henry Holt and Co., 1894), pp. 54–55.

Greek for 'simply'; therefore, a simplified pronunciation). The word was coined by the American philologist, Bloomfield. Haplology is not to be confused with dissimilation.

Slips of the tongue, of which we spoke a few paragraphs back, are caused by what has been called *associative interference.* Ideas do not exist singly; they tend to form clusters in the mind. We have seen that association of ideas is at the basis of all metaphorical expression. Just as there are mixed metaphors (confused, incongruous images), so there are mixed sounds. A certain word or expression starts a number of associated words or expressions going in the mind. The actual sounds we pronounce are a combination of these conflicting associations. We wish to say *sink;* we think of *sink or swim,* and the audible result is *swink.* We intend to say *trouble,* think of the *problem* that is causing the trouble, and actually say *troublem.* We wish to say *evade;* we think at the same time of *avoid,* for much evasion is avoidance; what we actually say is *evoid.* This happens before we are aware of it, of course, and frequently we correct ourselves on the spot. On the other hand, such composite words as *brunch,* to name the meal that combines *breakfast* and *lunch,* are consciously humorous formations. So are the remarkable portmanteau words of Lewis Carroll. The unconscious and the conscious formations, however, are built upon the same principle of association.

This association, at bottom, again as in the creation of metaphors, is based upon analogy. Analogy implies "resemblance of relations." The workings of analogy, in all the departments of language, are numerous and fundamental; *they frequently override the strictest rules.* In very fact, analogy becomes a rule of its own. We seek, naturally, to regularize our activities, and speech is one of the central activities of mankind. We interpret the unknown by the known; we classify the new according to our groupings of the old.

The matter of verbal slips, in its more purely phonetic aspect (which is never dissociated from the workings of the mind) brings up the Freudian theory as to such lapses. According to the founder of psychoanalysis a slip of the tongue

or pen is never without a reference to something that the conscious mind is trying to keep concealed. This is hardly the place to enter upon a critical examination of the theory, which is not without a certain value to psychology. A little phonetics, however, should serve to modify, in the minds of psychoanalysts, the applicability of the rather inflexible statement as to lapses.

It is easily conceivable, for instance, that when a young man is taking leave of the girl of his choice, to whom he has not yet dared to make an avowal, and says, "Well, I'll have to be *loving* you now," instead of "I'll have to be *leaving* you now," he has made a revealing slip. Meaning to say "I believe you," he will say "I belove you." In such a slip, at least two factors coöperate: his mental attitude, and (no less important for the slip) the similarity of the phonemes *love* and *leave*. Slips, then, are phonetically, as well as mentally, conditioned; they transpose sound-elements as well as mind-elements. When the Spaniard says *peligro* for Latin *periculum* he has only an *l* and an *r* to transpose, and the possibilities of any mental "give-away" is limited to the elements lending themselves to transposition. The so-called Freudian slips undoubtedly have a basis, at times, in defeated concealment; they are also conditioned by the phonetic elements, however, and it is often a question as to whether the transposed sounds or the transposed meanings are the more significant. Also, from the psychological-statistical point of view, it is important to consider how frequently these slips do *not* happen, under circumstances favoring their occurrence.

The child says *foots* for *feet* because it has come to consider *s* (from the preponderance of practical examples) as the sign of the plural, tacked on to the singular form. In the same way it says, until corrected, I *goed* for I *went,* out of a natural deduction, from the majority of instances that come to its attention, that the past of a verb is made by adding *d* to the infinitive: *I love, I loved.* Such errors frequently establish themselves in the language. Many nouns in use to-day represent errors that have been adopted. A *nickname* repre-

sents a false division of an *ekename. Eke* is akin to German *auch,* 'also,' and suggests addition. *Adder, cherry, riddle, apron,* for example, were originally *nadder, cherris, riddles, napron. A nadder* was misinterpreted as *an adder;* and *a napron* as *an apron; cherris* and *riddles* were looked upon as plurals in *s,* whereupon a singular without the *s* was manufactured. The history of *pea* is similar: *pease* was mistaken for a plural. The *n* of *napron* appears where it belongs in the related words *napkin* and *napery;* the *s* of *cherris* appears where it belongs in the related word *cerise* (i. e., cherry-color). The initial *n* of the word that has given us *orange* appears where it belongs in the Spanish words *naranja* (orange) and *naranjo* (orange-tree), and in the Sanskrit for orange-tree, *narānga. Orange,* however, lost its initial *n* before it came to our tongue; in Vulgar Latin, erroneously termed Low Latin, it was *arangia,* and should have given, in French, *arange.* Why *o*range? The initial *o* is associative, for *or* suggested the word for *gold* (*or,* from Latin *aurum*), and the orange is golden; indeed the *golden apple* that Paris awarded to Aphrodite may have been an orange.

When Latin *periculum* (danger, peril) produces Spanish *peligro,* with the *r* and the *l* of the original changing places, the process is called *metathesis.* Greek *metá,* 'after,' 'beyond,' 'between,' 'with,' and in Latin, *trans; meta* is akin to German *mit,* meaning 'with'; *thesis* is from the verb *tithénai,* 'to place,' or 'set,' and in Latin is *ponere,* the word that gives us, from its past participle, *positus,* which is in our word *position. Metathesis,* then, means *transposition.* The *r* and the *l* in the words *periculum* and *peligro* are transposed.

Metathesis is more common than one would suppose. In Middle English the word for *crocodile* (Latin *crocodilus*) was *cockadrill.* The *r* shifted to a position after the *d;* the Spanish word is still *cocodrillo,* with the same metathesis. I have heard *elasped* for *elapsed,* and *wiksy* for *whiskey.* Transpositions of *s* and a stop, or of *l* and *r,* occur frequently. English *bourn* is a metathesis with relation to German *brunnen.* The French ending *-aire,* from Latin *-arius* (our ending *-ary*), began as a

metathesis: *-airus,* in which *i* and *r* changed places. As in the pronunciation of children, certain errors of adult speech sometimes point the way to future linguistic developments.

Our *thirteen* was, in Anglo-Saxon, *thréotene,* and in Middle English *threttene.* (German, *dreizehn.)* The English form shows metathesis of vowel and *r.* Our *third* was Anglo-Saxon *thridda;* our *bird* was *brid. Thrill* was *thirlen* in Anglo-Saxon; it had become *thrillen* in Middle English.

Such transposition is less common, however, than the two types of occurrence called *assimilation* and *dissimilation.* Their meaning, as applied to phonetic change, is simple: in the first case, two unlike consonants are brought into uniformity by being made alike; in the second, two like consonants are split up into different ones.

Best was once *betst; last* was once *latst.* The first *t* in these older forms was dissimilated from the other *t.*

Latin *captivus* (captive) gives, in Italian, *cattivo. Cattivo* means 'wicked' in Italian; it is our archaic word *caitiff,* which also began by meaning a prisoner and descended, through such a significance as *unfortunate,* to the connotation of *meanness.* It is a sad observation that the unfortunate tend to develop, or to be considered as having, mean traits; at least, such is the testimony of language. We say that the Latin *pt* has been assimilated to *tt.* In the same way Latin *factum* (done) becomes Italian *fatto;* Latin *male-aptum* becomes French *malade;* 'to be sick' *(malade;* cf. English *malady)* is to be *ill adapted. Omit* was originally, in Latin, *obmitto,* which, through assimilation, became *ommitto. Immortal* was at first *inmortalis;* in Spanish the assimilation of *nm* to *mm* did not take place, and the word is *inmortal.* We write *solemn,* but that final *n* is not pronounced; it has been assimilated to the preceding *m;* we write *cupboard,* but we pronounce the word as if *pb* were a double *bb,* which, in truth, it is.

Many Latin and Greek prefixes—*ad, cum, ex, in, dis, ob, sub*—appear, in English words, in assimilated form. The list of such words is long, indeed. *Ad* alone, in assimilation, may appear as *a-, ab-, ac-, ad-, af-, ag-, al-, an-, ap-, ar-, as-, at-.* (A few

examples, of which the dictionary can furnish many: *ab*breviation, *ac*cession, *af*fianced, *ag*gravated, *al*location, *ap*preciation, *at*tention; the italicized elements of these words represent assimilations of the prefix *ad* to the consonants that follow.)

Examination of speech diagrams too often gives the student the impression that speech movements consist of a well-defined succession of separate motions. On the contrary, "Far from resembling the successive separate jumps in the escapement of a timepiece, speech movements may be compared to the waves on a broad expanse of ocean, rising and falling ceaselessly in endless variety, the one merging into the other, the lesser swept into the greater, and the surface rising on the 'tenth wave' with increased energy." [7]

Language, as spoken, is a continuous stream of speech, not the word-by-word listing of a dictionary. As the unit of thought is the sentence rather than the word, so the unit of speech is not the word but the syllable,[8] and syllables, in the continuousness of the speech-stream, influence one another, whether they form parts of the same word, or of different words. To this characteristic of speech the name *sandhi* (Hindu for 'connection') has been given. *Sandhi,* then, whether it affects the parts of a word, the union of one word with another, or the juncture of one sentence with another, is a syllabic phenomenon. It really consists in making speech more harmonious by facilitating its continuousness.

Sandhi is, in effect, a broader conception of what we have called assimilation. *Izzatso?* for *Is that so?, Whassamatter?* for *What's the matter?, Attaboy!* for *That's the boy!* illustrate the workings of *sandhi.*

Assimilation is caused by relative rapidity of speech; under

[7] Pillsbury and Meader, *The Psychology of Language,* p. 222.

[8] It is important to keep in mind, in order later to understand phonetic formulas, the distinction between open syllables and closed. A syllable is said to be open when it ends in a vowel or diphthong; it is said to be closed when it ends in a consonant. *Syllable* is from the Greek *syllabé,* meaning 'that which is held together.' In the word *doing, do* is an open syllable, *ing* a closed.

these circumstances the finer adjustments of the speech organs fail, and the result is a phonetic compromise.

Dissimilation is not so common as assimilation. It originates in the unconscious resistance to reduplication of sound, and is a form of associative interference. One of the duplicated sounds is altered. *Turtle* (in *turtle-dove*) was originally Latin *turtur;* the second *r* was dissimilated to *l.* English *marble* comes from French *marbre,* which in turn is derived from Latin *marmor.* We have dissimilated the French *r* into an *l.* Our word *pilgrim* is derived from Latin *peregrinus;* but already in later Latin, *peregrinus* had, by dissimilation, become *pelegrinus.* Hence, the *l* in our *pilgrim,* in the French *pélerin,* the German *Pilger.*

For dissimilation, M. Grammont, in 1895, established a simple law that is known by his name: the stronger speech-element (or *phoneme*) dissimilates the weaker. If the phonemes are equally strong, dissimilation does not take place. (For example, Spanish *sombrero,* 'hat,' does not become *somblero* or *sombrelo.*)

The term "associative interference" suggests that association is a matter not only of ideas but of mental and muscular habits. "Sound change is brought about by the repeated substituting of a sound or sounds almost imperceptibly differing from the original." [9] It is thus largely unconscious. We never make the same sound in exactly the same way; making sounds, like interpreting significance, and like language in general, is a matter of approximation, not of scientific exactitude. Our mind stores up motor-images of every sound and sound-combination we make; sometimes there is a slight confusion of motor-images and, consequently, of the vocal actions that they control. Hence the "associative interference," and the slightly altered result that, in time, may grow into a new standard of speech. Word-meanings often change as slowly, as subtly, as independently of our consciousness, as do the sounds that make up the words.

Sounds, as we see, disappear or undergo alteration, always

[9] Strong, Logeman, and Wheeler, in *The History of Language,* p. 43.

in the direction of the more familiar phonetic combinations. Sometimes new sounds are introduced. We have all heard such pronunciations as *warmpth* for *warmth; oncet* and *scarcetly* for *once* and *scarcely;* an *idear o' mine* for an *idea of mine; American Lawr Association; athaletic* and *elum* for *athletic* and *elm.*

The French verb *être,* 'to be,' comes from a Latin form that contained no *t,* any more than does our word *scarcely. Essere* (the Vulgar Latin form for 'to be') lost the sound of the second *e,* which disappeared because it was unaccented, and the word, in rapid speech, was understandable without it. It is at this stage that the *t* was introduced (*estre*) in much the same way that the *t* is heard in *scarcetly.* In the evolution of French sounds, the original *s* disappeared, while the intrusive *t* remained. The circumflex over the *e* in *être* indicates the original presence of the *s.* (Thus the spelling *apôtre* for *apostle; hôte* for *host; guêpe* for *wasp,* and so on, for numerous cases.) The *e* acute, in French, often indicates the omission of an earlier *s: école,* 'school,' Spanish *escuela; établir,* 'establish'; *étrange,* 'strange.'

In such cases as *athaletic* and *elum,* and *curazy* for *crazy* there may be an unconscious resistance to such less familiar combinations as *thl* and *lm,* and *cr.* Yet Oertel maintains that in such cases as *scarcetly,* utterance is not necessarily made easier, and that the "inserted consonant is simply due to a failure to arrange the necessary movements in the proper order, and this, in turn, is caused by an increase in speed. Afterwards the form which the word necessarily assumed in rapid utterance may often be extended to its slow delivery."

The loss of a vowel through rapid utterance (it is normally an unaccented vowel) is called *syncope,* which is from a Greek word meaning 'to cut short.' *Every* is not pronounced as it is written; the middle *e* is syncopated. Such phrases as *I'm, you're, he's, it's,* show syncopation of the vowels *a* and *i* in *am* and *is.* These vowels could not possibly be syncopated in emphatic expression such as *You are!,* in which the verb contradicted an assertion. We cannot imagine a stage situa-

tion, for example, in which the question, "Is he the criminal?" is answered, climactically, with the triumphant, revelatory statement, "He's!" It must be "He *is!*"

The opposite of syncope is *anaptyxis,* which is Greek for 'unfolding.' Here the vowel, instead of dropping out, intrudes. *Henery* for *Henry, athaletic* for *athletic* are examples familiar in everyday English. Frequently, of course, such dropping and intrusion of vowels become standardized. The Latin for *cup* was originally *poclum;* the word we are taught in classic Latin is *poculum;* the first *u* came in by anaptyxis. *Lm* is not a very common combination in English; hence one reason for our *elums* for *elms* and *fillums* for *films.* A misused term for this is *epenthesis,* which is Greek for 'insertion.' It occurs with consonants, too; *warmpth* for *warmth; nimble* for what was originally *nimel.* (The word is akin to German *nehmen,* 'to take,' and may suggest quickness at taking.)

Of all these terms it may be said that they could, and perhaps ought, to be replaced by a terminology less formidable to the student. To be sure, the terms have been consecrated by generation after generation of usage, and form part of the international language, the *esperanto,* of grammarians. Perhaps, too, the student could make the matter of terminology less formidable for himself by looking such names as *epenthesis* and *anaptyxis* fearlessly in the eye and conquering them from the first meeting by an understanding of what they mean in their original tongue. *Epenthesis,* once it appears as Greek for 'insertion,' seems to cow before the student like an animal which has suddenly met its master, and is thenceforth a tame beast. There is hardly a term in linguistics (and not in linguistics alone) that cannot be thus tamed by being led to a large dictionary.

A living language, then, does not in any of its essential elements stand still. Change is the condition of its existence.

The differences that separate the languages of the globe are essentially the same as the differences that arise within any single language. They are based upon the physio-psychological

constitution of the human being. Languages break up into dialects and into other languages as a result of the extension of these changes. In these pages we have paid special attention to one highly important type of change—change of sound, phonetic change.

We have seen that when we mean to say one thing and say another; when we transpose simple sounds or complex sounds; when we hesitate or trip over certain combinations of sounds; it is because there has been interference in the mind and, consequently, in the organs controlled by the nerve centers. The simplest sound, for that matter, is highly complex in formation and utterance. It does not occur in isolation; it is part of a continuous stream, and is affected by what goes before and what comes after. There is *sandhi* in thought as well as in the seemingly more mechanical aspects of speech. We anticipate; we retard.

In German there is the vocalic phenomenon known as *umlaut;* in English it has been called *mutation.* Umlaut (the word was invented by Jacob Grimm, the German philologist, and has been taken into English by the linguists) refers to the influence, upon a preceding vowel, of a vowel in a later syllable. For example, German for *man* is *Mann;* for *men* it is *Männer,* pronounced *menner* (the *ä* is pronounced much like our short *e*). The *a* (as in *father*) of *Mann,* under the influence of an old *ir* in the plural ending, became *e;* that is, the sound of the vowel in the plural ending, *er,* was anticipated, and turned the *a* of *Mann* into *ä.* If, to-day, we say *men* as the plural of *man,* and *feet* for the plural of *foot,* and *geese,* for the plural of *goose,* it is because, before these words came into modern English, they were affected by umlaut—by a final vowel that has since disappeared. Umlaut was characteristic of Anglo-Saxon, as well as it is of German. Umlaut, then, is a psychological anticipation.

Umlaut is so called from German *Laut,* 'sound,' and *um,* 'about.' The sound is worked about. There is also *Ablaut* (German *ab,* 'off'). Ablaut is known in English as vowel gradation, or as *apóphony. Apophony* is Greek; its construction is

precisely paralleled by the German composition of *Ablaut.* Yet another word for *umlaut* is *metaphony,* which is preferred by some phoneticians.

Ablaut refers to the variation of the root vowel in different forms of the same word. For example: *sing, sang, sung; drive, drove, driven; get, gat, got.* In Old English this verbal "irregularity" (such verbs are called "strong" in German) was a more living factor than it is in our language to-day. The phenomenon itself goes back to the era before the Indo-European speech split up into independent languages; it is supposed to have originated in peculiarities of word and sentence accent.

One can see, from this, how important in speech is the phonetic context, the psychological and physiological environment, the mental and bodily circumstances in which speech sounds are produced.

§ 4. CHANGE IN TIME AND SPACE

Many phonetic changes have been catalogued, codified. Some of them are so striking, so uniform in their workings, that they have even been grouped into phonetic "laws." These laws help to make clear the historical relation of certain languages to other languages, just as, within a single tongue, they (or similar laws) help to make clear the relation of one dialect to another dialect.

It will help, when we come to consider these laws, or these formulas, to keep in mind the ever-fluid nature of living language. Languages, especially those of interrelated groups, are not so distinct from one another as they appear to be, or even as they sound. They are not separated by boundaries as clear as national frontiers on a map. A linguistic map, indeed, is a vast area of blending tongues in which the differences may be so gradual as almost to deceive the traveler into perceiving uniformity.

That which keeps peoples together favors the retention of a common speech.

That which separates peoples speaking the same tongue favors the development of a differentiated speech.

Time as well as space may separate peoples. No grandparent speaks precisely the same language that is spoken by his grandchild. What we call a language, even that spoken by a homogeneous country—that is, one made up of the same racial elements—is really a multitude of personal languages, varying slightly in the case of each individual. They recognize a standard type, however, from which dialects and personal usage are, like slang and shop or professional talk, acknowledged deviations.

What distinguishes one language from another, in practical terms, is the question of intelligibility. The phrase "American language," though useful, is strictly speaking a misnomer, for Englishmen and Americans, after all, manage to understand one another. The usefulness of the phrase is this: it emphasizes the existence of differences that may, at some future date, lead to a lessening of reciprocal understanding, which may, in turn, lead to a distinct linguistic cleavage.

No Englishman will deny that Chaucer's English is virtually a different language from the one that he speaks and writes; he has to study its forms, its vocabulary, its phonetics; it sounded, indeed, far more different from the English of to-day than it looks. When we come to Anglo-Saxon we do not use such a word as "virtually"; the language is not English, uncomfortably not. Yet it is from such sources as these that contemporary English was derived. People never stopped talking; the language evolved in their very breath. Since language never stops evolving, since separation of groups favors the evolution of differences, since American English exhibits already striking differences from "English English" in vocabulary, syntax, and phonetics, the path is laid for the evolution of a new language. It is true that preservative forces may oppose the forces of change. All presupposition, none the less, favors the chances of ultimately radical change. It is a matter of time; while we deny change, change goes on and the very language of our denial changes.

Sound-changes, then, in their deeper implications, include the mind and the body; they represent psychology and physiology; they occur in time (chronologically) and in space (geographically); they are, in brief, a resultant of all the forces involved in sentient life. Should this be so strange? Can mind and body really be separated? Can psychology and physiology, in the living organism, be severed?

CHAPTER XI

"PHILOLOGERS . . ."

To chase
A panting syllable through time and space,
Start it at home, and hunt it in the dark
To Gaul, to Greece, and into Noah's Ark . . .
COWPER

The laws of phonetics do not rule without control; they can no more destroy an indispensable word, or a merely useful one, than they can ensure the continuance of a superfluous form. MICHEL BRÉAL, in *Essai de sémantique.*

§ 1. OLD THEORIES AND NEW

LINGUISTIC SCIENCE IS VIRTUALLY THE CREATION OF THE nineteenth century. Although inquisitive spirits had been speculating for many hundreds of years upon the origin and the relationship of languages, they had been groping and guessing in the dark. There were polyglots; men who knew—or, rather, spoke—numerous tongues. If the Swiss scholar Gesner published in 1555 a survey of all known languages, and called it *Mithridates;* if the German scholar Adelung wrote, two hundred and fifty years later, another *Mithridates* with the same general purpose, it is because King Mithridates the Great of Pontus, in the century preceding the birth of Christ, was supposed to know twenty-five languages. There is, however, a great difference between a polyglot and a philologist. The first may speak many tongues; the second, rather than speak them, must know them as structures; must understand their origins, development and trend.

"Who knows no other language," said Goethe, "knows not his own." He meant that in order really to understand language, one must have material for comparison. Languages

do not spring full-born from the mouths of their speakers. Yet even the polyglot, with his speaking knowledge of many tongues, may remain linguistically ignorant if he does not know how to make use of the vast material at his command.

The Greeks were in the position of Goethe's imaginary single-tongued speaker. As a nation, they were aware of no other language. Europe, until the late eighteenth century, was in the position of the polyglot, who knew many tongues but was still, in any deeper sense, linguistically ignorant.

If certain Latin words resembled certain Greek words, this was taken for proof that Latin had descended from Greek—that Latin, indeed, was "a corruption" of Greek. The idea of evolution was not yet dreamed of, except in a very general, poetic fashion. The very use of the word "corruption" suggests a worship of antiquity and priority for their own sakes. Even to-day it is possible to read of linguistic "decay," rather than of change or evolution.

The cult of Hebrew as the original tongue, parent of Greek and Latin and all the other languages of man, was yet another witness to this cult of antiquity and priority—a sort of cultural ancestor worship. It was a simple matter to seize upon the fancied resemblance of this Hebrew word to that word of any other tongue, and from this resemblance to build up a case of linguistic consanguinity. In much the same way, when the American Indians were thought to be descendants of the lost tribes of Israel, Indian words were brought—or forced—into concordance with the Hebrew forms.

During what may be called the polyglot period, however, much material was being assembled for later investigators to work upon. Scaliger, as early as 1599, grouped his four chief classes of language after their word for God, and called them, respectively, the *deus-theos* (i. e., Latin-Greek), *gott* (Germanic), and *bog* (Slavonic) languages. The names of these groups suggest a recent division of the Indo-European tongues into *centum* and *satem* languages, based upon their respective words for *one hundred.* For two centuries, on the basis of no stronger evidence than could be adduced for the Hebrew

parentage of existing tongues, it was thought that Persian and German were linguistic kin.

It was Leibniz who, early in the eighteenth century, put an end to the Hebrew theory, and made the bold announcement that all the tongues of the continents were descended from a single parent language. "The huge territory which he regards as a unit," comments Pedersen, "we now divide among from five to eight linguistic families; . . . it is . . . clear that Leibniz's grouping rests upon no thorough-going analysis, but upon . . . inspired intuition." [1] Leibniz was thus a forerunner of the Italian Trombetti, whose most thorough-going analysis still left in doubt the origin of languages in a single proto-historic tongue.

This groping, however informed and intelligent, might have continued thus blindly for ages, were it not for the "discovery" of Sanskrit. The sacred language of the Hindus comes upon the scene like a *deus ex machina,* in one of the central moments of all linguistic investigation. Small wonder that for long it received the worship hitherto bestowed upon Hebrew.

In the history of languages the discovery of Sanskrit is comparable to the discovery of America in the history of the continents. It altered, at one stroke, the whole map of linguistic research.

The history of language is hardly the province in which one would look for excitement or for heroes. Yet, for those who have a more subtle sense of values, it contains both, and in plenty. The heroes, to be sure, are those of patient, self-effacing, almost anonymous industry; in their dedication, they are comparable to the heroes of science, whom they much resemble. And surely the excitement of discovering the key to lost civilizations must be as great, in its way, as witnessing the smash of a home-run in the ninth inning, with two out, the score tied, and three men on base.

A lonely scientist toils away in his laboratory over a problem that seems astronomically distant from the concerns of

[1] Holgar Pedersen, *Linguistic Science in the Nineteenth Century,* p. 9.

humanity; he makes a discovery that has no apparent relationship to anything useful in this world. All at once, or perhaps years later, a relationship is discerned between his useless discovery and another discovery equally useless, and out of these two useless data a usefulness is constructed which in time results in the conquest of a hitherto inconquerable disease.

So, too, a philologist may for years be occupied in speculating upon the external resemblances between one mode of speech and another. He traces the relationship between vowels and consonants in one tongue and those in another; he chases "a panting syllable through time and space." Then all at once, as the result of such isolated and seemingly frivolous pursuits as these, an idea dawns in the mind of an investigator. Out of two useless data a usefulness is constructed which in time results in the conquest of a hitherto unconquerable problem.

A stone is dug up, and it shortly appears that what has been excavated is an entire civilization. A manuscript appears, and it opens the door to a culture hitherto sealed. What, in comparison with the decipherment of these engraved stones, these writings from another world, is the pallid tale of detection in which an insignificant investigator solves an insignificant code? What is even such an excellent tale as Poe's *Gold Bug* compared with the skill, the patience, the learning, the intellectual courage that went into the deciphering of the Darius Rock, which yielded the secret of cuneiform (i. e., *wedge-shaped*) writing? What is it in comparison with the deciphering of the Rosetta Stone, which disclosed to the world the secret of the Egyptian hieroglyphics (i. e., *sacred carvings*)? Such triumphs are part of the greatest detective story of all: man's discovery of man.

Such a triumph was the disclosure of Sanskrit to the Western world. Few paragraphs, in the light of what they were to mean to modern culture, are more exciting than the sentences that appeared in *Asiatick Researches,* by William Jones, published in 1786.

The Sanscrit language, whatever be its antiquity, is of a wonderful structure; more perfect than the Greek, more copious than the Latin and more exquisitely refined than either; yet bearing to both of them a stronger affinity, both in the roots of verbs and in the forms of grammar, than could possibly have been produced by accident; so strong, indeed, that no philologer could examine them all three without believing them to have sprung from some common source, which, perhaps, no longer exists. There is similar reason, though not quite so forcible, for supposing that both the Gothic and the Celtic, though blended with a very different idiom, had the same origin with the Sanscrit.

Columbus imagined that he had discovered India by a new route; that is why the American aborigines are still known as Indians. Jones, in his *Asiatick Researches,* was the Columbus of modern philology; it was a real India that he discovered, and by a new route indeed! And Jones's Indians (the roots of *Indian* and *Hindu* are the same) formed a cultured society that was linguistically far advanced. The Hindus, in the shape of Panini, had had a grammar of their sacred tongue since 300 B. C., and grammarians say that Panini is still valuable for moderns.

This climax of eighteenth-century language research was the signal for, the cause of, the flourishing of philology in the nineteenth. The rule of Hebrew, Greek, and Latin was over. Now followed a veritable flood of works based upon the new knowledge. Now, for the first time, we hear such phrases as *comparative grammar,* from Friedrich von Schlegel's book on *The Language and the Wisdom of the Hindus* (1808); his brother, August Wilhelm, becomes professor of Sanskrit at Bonn; Rask, even without the use of Sanskrit, hits upon the two sound-shifts in the history of the Germanic tongues that are to be named after Grimm; they will be specially considered under his name. Franz Bopp clarifies the conjugational system of Sanskrit as it compares with that of Greek, Persian, and Germanic, and virtually founds the science of comparative linguistics; Sanskrit, supposed to be a generally more primitive language than Greek, becomes the fountainhead of linguistic research.

In the far-off United States, Noah Webster, as early as October, 1807, had been complaining against capricious etymologies, in *A Letter to Dr. David Ramsey . . . respecting the Errors of Johnson's Dictionary*. In that work, etymologies had been established by guesswork, or by the Hebrew-Greek-Latin bias of the lexicographer. Samuel Johnson, the Great Panjandrum, invented when he was not sure; and when he was sure, he was frequently wrong. As Webster wrote, "almost everything remains to be done."

Rask's epoch-making investigation was not to appear until 1818; Jacob Grimm's *Deutsche Grammatik* (*German Grammar*) was not to appear until 1819, with an edition three years later that showed the unmistakable influence of Rask, whom Grimm had studied between editions.

Webster, in the meantime, was being sneered at for his dissatisfaction with Johnson's old-fashioned etymologies. He may have been tactless, as his latest biographer, Warfel, avers, "in the way he besmirched England's lexicographical saint, but the fact remains that the American schoolmaster was correct. It may seem an idle bit of guesswork to say that in 1817, when Webster completed his still unpublished synopsis, the American philologist had penetrated more deeply into language problems—the hidden Sanskrit excepted—and that he was more nearly correct in his theories and conclusions, than any Englishman and many Teutons. But the fact is capable of proof." [2]

Modern linguistics has been divided into two main periods. The first begins in 1833, the date of Bopp's comparative grammar; the second begins sometime during the early 1870's.

Rask and Bopp had made clear the interrelationship of the languages that comprise the Indo-European family.[3] What remained to be done was to establish the relative importance of morphology (inflections) and phonology (sound-laws). Such

[2] H. R. Warfel, *Noah Webster, Schoolmaster to America* (The Macmillan Co., 1936), pp. 347–348.

[3] The main features of this interrelationship will be considered in a later chapter, as will the choice of the name *Indo-European* in preference to the older designations, *Aryan* and *Indo-German*.

scholars as Schleicher, for example, still under the influence of older notions, could believe that language had completed its evolution in the epochs before history; the epochs of historic times, he thought, could show only decay. Linguistically, this was a counterpart of the belief that since the exile from Paradise man had fallen. Rask had already introduced the idea that not only agreement in inflectional systems, but agreement in phonetic characteristics, constituted a valid guide to linguistic relationship; in other words, vocabulary, properly examined, could provide clues as well as grammar.

It remained for the newer philologists—Ascoli, Thomsen, Verner, and Brugmann, among many others—to make discoveries that introduced a new conception of orderliness, of "law," into the evolution of sounds. Phonetics was shown to be a science. Sound-change was shown to be, not capricious, but regular in a highly complicated fashion. Exceptions to rules were explained as conformity to hitherto unsuspected determining factors.[4] Brugmann, in 1876, announced that the parent language of the Indo-European tongues contained syllables without vowels; it was a highly technical (and a hotly contested) discovery, but it resulted in a new conception of prehistoric linguistics. It helped to change our notions of what primitive word-roots were like, and to reveal those roots as being a less simple structure than we had believed.

There is no sense in blinking the fact that phonetics and phonology are, for the layman, the least attractive, because the most complicated and technical, of linguistic branches. Yet they are not, fundamentally, more complicated than radio hook-ups or automobile construction, about which the layman, once he is interested, acquires much practical knowledge and in which he attains much skill.

In reviewing, first, certain phonetic correspondences between the more familiar languages; and in considering, after that schematic review, certain of the laws founded upon closer

[4] See, in § 3 of this chapter, Verner's Law as an explanation of exceptions to Grimm's Law.

correlation of those correspondences, we follow the chronological order in which those branches of modern linguistics developed.

§ 2. PHONETIC CORRESPONDENCES

Phonetic formulas are based upon the close observance of phonetic correspondences. Let us, without any phonetic formulas in mind, observe more or less at random some of these correspondences.

Latin initial *f* appears in modern Spanish as *h,* which is not pronounced in Spanish. *Facere,* 'to make' or 'do,' thus becomes *hacer; farina,* 'meal,' becomes *harina,* 'flour'; *fatum,* 'a fate,' gives us Spanish *hado,* 'a fairy.'

Latin *campum* gives French *champ; caput* gives *chef; cantare,* 'to sing,' gives *chanter;* the Latin initial *c,* followed by *a,* becomes palatalized in French, evolving into the sound represented by *ch.*

Observe the varying fate of Latin *cl* at the beginning of a word, as it evolves into French, Spanish, Portuguese, and Italian, respectively:

LATIN:	*clamare,* 'to cry out,'
FRENCH:	*clamer,* 'to cry out'
SPANISH:	*llamar* (*ll* is a palatalized *l*)
PORTUGUESE:	*chamar* (*ch* sounds like our *sh*)
ITALIAN:	*chiamare* (*chi* sounds like our *ki*)

Each of these Romance tongues shows a different development of the Latin *cl.* Of the possible alterations in the original Latin speech at first unconscious and very close to the standard for that sound, each new tongue seems to have selected an individual variation. Except French, which retains the *cl.* Observe that *all* these variations were inherent in the original sound.

Latin *bonum,* accusative of *bonus,* shows likewise a varied development in the neo-Latin (Romance) tongues. French gives *bon,* which is more different from the original than it looks in print, since the *o* of *bon* is nasalized. Spanish gives

bueno; Italian, *buono.* The accented *o* of the Latin is said to "break" in these last two instances.

Between prehistoric Latin and classical Latin there are interesting correspondences. In its older state, Latin accented all words on the first syllable. For that matter, this is true of modern Hungarian. Before Latin *confícere* became what it was, it was *cónficere;* before that it was *cónfacere.* It is important to notice the accents. The accent on the original *con* of *cónfacere* weakened the force of the breath upon the following unaccented *a.* Such unaccented vowels frequently give way to a weaker vowel. *I* (as in *comfit*) requires less opening of the mouth than does *a.* That later the accent should follow the change of vowel is another matter. Moreover, such changes may be characteristic of only a certain period in the history of a language. The original first-syllable accent of Latin words thus helps to explain many seeming irregularities in classic Latin.

In the same way, the original accent of classical Latin words helps to explain what happened to those words later, in the minds and mouths of the groups destined to become Frenchmen, Italians, Spaniards, Rumanians, Portuguese, Catalonians, and Provençals.

To proceed, again more or less at random:

Armenian *h* appears where in Greek we find *p:* Greek *pyr,* 'fire,' is Armenian *hyr;* Greek *pater* is Armenian *hayr.* Latin *s* becomes a Slavic *ch* sound (*ch* as in German). Thus *jus,* 'soup,' in Slavic is *jucha.* Anglo-Saxon accented *ā* becomes, in modern English, *o: hāl* becomes *whole, hām* evolves into *home, tācen* into *token.*

Observe the correspondence of the *d's* in Latin and Greek with the *t's* of English:

Latin or Greek	English
*D*ecem	*T*en
*D*uo	*T*wo
*D*ens	*T*ooth
cor*D*em	hear*T*
e*D*ere	ea*T*

Notice the *c* of *cordem,* 'heart'; in English it is represented by *h.* The same relation is to be seen in the equivalence of *cornu* and *horn.*

There are other correspondences that may, before we arrange them into useful and important formulas, be considered in this desultory fashion. We are still, as readers, in much the position that the Europeans were as students of language before the discovery of Sanskrit came to suggest a more than desultory manner of regarding correspondences.

Greek *pater*	English *father*	(*p* corresponding to *f*)
Greek *treis*	English *three*	(*t* to *th*)
Greek *gyne* (woman)	Old Norse *kona*	(*g* to *k*)
Greek *genos*	English *kin*	(*g* to *k*)
Latin *macer*	German *mager*	(*k*-sound to "hard" *g*)
German *Zoll*	English *toll*	(*z*—i. e., *ts*—to *t*)
German *Kupfer*	English *copper*	(*pf* to *p*)
Latin *quis* (who)	German *wer*	(German *w* is pronounced *v*)

Such changes as these may be placed in a series, representing the evolution of a single sound, or of a sound-combination, from the earliest available records down to the latest available; or, to be more exact, comparing the fate of any specified sound-unit—the changes that it undergoes in various speech-zones.

I have already cautioned the reader not to confuse the printed or written *letter* with the *sound* for which the letter stands. A further precaution is necessary, even if it involves repetition. Ultimately, what we are dealing with is not so much the sounds themselves as with changes in the nervous impulses, the muscular movements, the social conditions.

§ 3. GRIMM'S LAW—VERNER

By a pleasant irony, the name of Jacob Grimm is associated in the history of philology at once with the nursery and the college. *Grimm's Fairy-Tales* (collected by Jacob and his brother Wilhelm) are known wherever children thrill to

stories of giants, dwarfs, and enchanted human beings. The phonetic law that is named after Jacob Grimm is, if one may pardon the pun, more grim than fairy-tale. At least, so it appears to be until one inspects it more closely and discovers in its operations a scientific charm that is to be discovered likewise—if one knows how to look, and looks as the Grimms themselves looked—in the fairy-tales themselves.

For behind the collecting of the tales lay the same scientific spirit that led to the codification of the phonetic changes now grouped under the name of Grimm. The name by which the law is known has not remained uncontested. It appears that it was named after the German in much the same way that our country was named after Americus Vespucius rather than after Columbus. Certainly, in a general fashion, Rasmus Rask, the Danish philologist, had played a pioneer rôle, indicating in his prize essay upon the origin of the Old Norse, or Icelandic, language both the consonantal shifts that comprise the full statement of Grimm's Law.

The law as we know it to-day has been modified in detail by such specialists as Karl Verner and Grassman and Fick. Before we attempt to clarify it, let us make a few pertinent observations. There is no single, simple statement of the law. Grimm's original presentation was faulty and incomplete. Almost every book that one opens, in which reference to Grimm's Law is made, contains a presentation different from what is to be found elsewhere. Frankly, it is, for the beginner —and not for the beginner alone—confusing. As usually set down, it looks more like a mathematical than a linguistic formula. Also, it seems to suggest that one sound in a series is derived from another, instead of being, together with it, a descendant from a single original sound.

It is wrong, for example, to regard the Romance languages as being derived from one another. They are not. They are, so to speak, sister-tongues, all stemming from Latin.

Thus it is wrong to regard the Teutonic languages as being derived from one another. They, too, are sister-tongues, all stemming from Primitive Germanic.

Greek and Latin and Primitive Germanic, likewise, are not derived from Sanskrit. They are sister-tongues (or, for that matter, brother-tongues!) of Sanskrit.

In simplified terms, the Latin, Greek, Primitive Germanic, and Sanskrit tongues have a sisterly or brotherly relationship to each other, even as the members of the Romance group have each to the others, and as the members of the Teutonic group have each to the others.

Grimm's formula, in simplified terms, may be expressed in at least two different ways. The first, and the more usual way, is to set it down in the familiar letters of the alphabet, which stand for sounds. The second is to express it in phonetic language—in terms of voiced and voiceless consonants. It will help to an understanding of the formula if we consider it in both methods of statement.

It will be observed, first, that the law concerns *the alteration of consonants only;* second, that it deals with the transformation or evolution of these consonants *from the parent Indo-European tongue into the Germanic tongues.* It thus has a relevance to English, which is a Teutonic language; *it has no reference to the languages that developed out of Latin, nor to any languages outside the Indo-European classification.*

It may be well to be reminded, none the less, that this does not indicate the foundation of Grimm's Law upon human characteristics restricted to the peoples speaking the tongues with which his law is concerned. It means simply that, at a certain period in the history of these tongues, these changes, ultimately caused by the mentalities and organisms of those peoples, took place. Those mentalities and organisms were fundamentally the same as yours and mine.

It is to the credit of Jacob Grimm, whether as scientist or as human being, that he recognized the importance of the humbler classes to philology. It was thus not an accident that he and his brother, rather than someone else, should have gathered so fondly the creations of the popular mind: the fairy-tales, the nursery rhymes, the ballads, which had been regarded contemptuously by their predecessors. Before them,

under the influence of the schools and the church, only the classics and the Bible had been deemed worthy of scholars' attention.

In the same spirit, Jacob Grimm claimed for the humblest tongue equal attention with that bestowed upon the linguistic aristocrats of philology. Jespersen quotes Grimm's review of Rask's Icelandic grammar. "Each individuality, even in the world of languages, should be respected as sacred; it is desirable that even the smallest and most despised dialect should be left only to itself and to its own nature and in nowise subjected to violence, because it is sure to have some secret advantage over the greatest and most highly valued language." [5]

This is a sage counsel that needs, unfortunately, to be borne in mind even to-day, more than one hundred and twenty-five years after it was written.

For the layman, and even for the average student, it would be confusing to consider in detail the earliest statement of the law, and to follow the course of its correction by other scholars until it emerged in the form in which it is generally known to-day. What we find hereunder is a modified, simplified statement. The underlying importance of the formula is not weakened, however; it stands as testimony to the regularity with which certain changes of far-reaching effect take place. Grimm's Law is but one of a number of formulas that serve to reveal the operation of linguistic change. It is one of the great pioneer triumphs of phonology, and all the more surprising in that Jacob Grimm was a poor phonetician, with a trace of mysticism in his constitution.

"The law which goes by his name," writes Oertel, speaking for many who precede him and all who follow, "is the foundation upon which the method of modern phonology has been reared, and it is this new department of grammar which was the first to deprecate chance and caprice and to insist upon order and regularity, without which no scientific investigation can exist."

[5] Otto Jespersen, *Language: Its Nature, Development, and Origin* (Henry Holt and Co., 1934), p. 41.

Grimm, then, with a pioneer hint from Rask, established in the phonetic history of the Germanic group of languages the principle of the sound-shifts, or, as he called it, *Lautverschiebung*. There were two sound-shiftings. The first occurred before the fourth century; the second had run its course by the eighth. The first concerns the Low German group; the second, the High German. The second shift is far less important than the first, especially for English students, since English is related directly to the Low German group, not to High German.

The formula I present below is that of the English philologist Skeat, who made more than one simplification of it.[6]

The consonants are ranged in four rows.

The first row consists of a *dental* series.

The second row consists of a *labial* series.

The third and fourth rows consist of a divided *guttural* series.

DH or *TH* shifts to *D;*	*D* to *T;*	*T* to *TH*
BH shifts to *B;*	*B* to *P;*	*P* to *F*
GH shifts to *G;*	*G* to *K;*	*K* to *H*
GHw shifts to *Gw;*	*Gw* to *Q*(*Kw*);	*Q* to *Hw*

Some of these shifts have already been exemplified in the phonetic correspondences that we have listed in the previous chapter. It will be very helpful to consider now some examples of shiftings that correspond to each item in each of the rows outlined above.

Dentals

DH or *TH* to *D:*	*Greek, th*ugater,	English, '*d*aughter'
D to *T:*	*Latin, d*ecem,	English, '*t*en'
T to *TH:*	*Sanskrit, t*vam,	English, '*th*ou,'

Labials

BH to *B:*	*Sanskrit, bh*rater,	English, '*b*rother'
B to *P:*	*Old Bulgarian,* slabu,	English, 'slee*p*'[7]
P to *F:*	*Latin, p*ecus,	Anglo-Saxon, *f*eoh (cattle)

[6] This is the variant that is to be found in *A Primer of English Etymology,* Chapter VII.

[7] Old Bulgarian *slabu,* 'slack,' from a root *sleb,* 'to be slack'; *sleep* was originally "to be relaxed" (Skeat). There are few examples of this change.

GUTTURALS

GH to *G:*[8]	Greek, *ch*ole, Latin, *f*el, English, '*g*all'
G to *K:*	Greek, *g*onu, English, '*k*nee' (k now silent)
K to *H:*	Latin, *c*entum (*c* like *k*), English, '*h*undred'

I omit consideration of the second series of gutturals because it introduces material that would only confuse the layman.

The second sound-shift, we have seen, concerns High German especially. It will be best appreciated by English readers from a comparison of English consonants with German.[9]

ENGLISH	GERMAN
*d*aughter	*T*ochter
be*tt*er	be*ss*er
wa*t*er	Wa*ss*er
*t*en	zehn (*z* sounds like *ts*)
fea*th*er	Fe*d*er
*th*at	*d*as
a*p*e	A*ff*e
*p*ound	*Pf*und
a*pp*le	A*pf*el
boo*k*	Bu*ch*
eig*h*t	ac*h*t

I subjoin a formula for the Grimm sound-shifts that considers both the Low German (first sound-shift) and the High (second sound-shift). Moreover, it considers the sound-shifts from the point of view not only of the letter-symbols but also of the consonant-types.

[8] In print the statement of the guttural shiftings is complicated by the fact that so many different *letters* have been used to represent similar sounds. Thus GH, in this series, stands for Latin *h* or initial *f*, for Greek *ch*-sound, as in the German *ch;* and so on.

[9] By German I mean Modern High German—the language that we have in mind when we speak of German to-day, as distinguished from the group that includes Scandinavian, Norwegian, Danish, Icelandic, English, and other Teutonic tongues of the Low German classification.

Indo-European becomes, *in Low German*	and *in High German*	
gh	g	k(g)
dh	d	t
bh	b	p(b)
g	k	ch(k)
d	t	z(sz, ss)
b	p	pf, f
k	h	h
t	th	d
p	f	f

The first group consists of aspirates; the second, of voiced stops; the third, of voiceless stops. An older name for voiced stops is *mediae;* an older name for voiceless stops is *tenues.* These terms, though Latin, applied originally to Greek phonetics. *Tenuis* (of which *tenues* is the plural) designated the *thin, fine* or *weak* consonants—that is, the ones without voice. *Tenuis* is akin to our word *thin,* and is to be found in our word *attenuate,* which means 'to make thin.' *Mediae* is the plural of *media* from Latin *medius,* 'middle.' It designated the Greek voiced stops, because they were *between* the *tenues* and the *aspiratae,* or *aspirates.* The aspirates, of course, were the roughly breathed sounds. The newer terminology is better than the old, but something—indeed, much —needs to be done about giving uniformity to the terminology of phonetics.

It is not expected of laymen, or of any but highly specialized students, that they shall try to memorize even such simplified tabulations of Grimm's Law as those I have given. What the laymen should try to do is to get a feeling for the underlying principles: that at certain epochs in the history of language, certain sound-changes take place, over long periods; that if these changes are sufficiently radical, they help lead to the evolution of a new tongue; that certain of these changes may be codified; that the codification starting with Rask and

Grimm, dealing with a veritable chart of consonant-changes that exhibit striking uniformity, is the most famous of the formulations yet drawn up for any series of phonetic changes in any language-group. The details for a specific change, and for the history of a specific change, may easily be found in any number of books upon linguistics. It is more important, at first, to get what I have called a feeling for the underlying principles.

Karl Verner, in 1875, added to Grimm's Law a subsidiary law that has become known by his name. He explained certain irregularities in the Grimm series by referring to the position of the accent in the Indo-European word. For example, according to Grimm's Law, the Anglo-Saxon forms for 'father,' 'mother,' and 'brother' should have been *fæther, mothor, brothor,* since the Latin *pater, mater, frater* have, as middle consonant, *t,* which should give *th.* (Remember that the first sound-shift includes all the Teutonic tongues except High German.) Why, then, has Anglo-Saxon only *brothor,* where the *th* is regular; why are the other forms (*fæther, mothor*) missing? Why does Anglo-Saxon show, instead of *fæther, fæder:* medial *d* instead of medial *th?*

Verner pointed out that in Sanskrit the accents of the words for *father, mother* and *brother* fell as follows: *pitár, matár, bhrátar.* Observe that in the first two words the accent occurs *after* the *t;* in *bhrátar* it occurs *before.* The development of *bhrátar* was therefore regular; *t* shifted to *th.* (Anglo-Saxon *brothor,* English *brother.*) In cases where the accent occurred *after* the *t,* however, a further shifting took place; the *t,* instead of shifting to *th,* shifted to *d,* giving Anglo-Saxon *fæder* and *modor.* Verner's Law explained other peculiarities of Anglo-Saxon phonetics and grammar.

As with Grimm's Law, so with Verner's, the important consideration for the layman is not so much the law itself in all its exemplifications; it is rather the realization of the part that accent plays in the development of words. In our early training, it often seemed to us that our teachers insisted somewhat fanatically upon such technical matters as division

of words into syllables; accentuation; and grouping of vowels and consonants. It now appears why they did so.

§ 4. ZIPF'S DYNAMIC PHILOLOGY

To current theories of phonetic and linguistic change, another has been added; it clarifies rather than contradicts what we already have, and suggests a long-needed unification of principles. The new dynamic philology of George Kingsley Zipf is a statistical approach that may cause important revisions in all theories of sound-change, accents, inflections, and declensions.

Among the results of Zipf's investigations are two general principles, one of economy and the other of equilibrium. According to the first, the more a word is used, the shorter it tends to become. The less frequently it is used, the less likely it is to undergo phonetic alteration. This, Zipf calls the "law of abbreviation." Equilibrium, in language, is really a balance between high and low frequency in the employment of words and syllables. There seems to be a ratio between the use of long forms and short, maintained unconsciously.

"The high degree of orderliness of the distribution of words in the stream of speech points unmistakably to a tendency to maintain an equilibrium in the stream of speech between frequency on the one hand and what may tentatively be called variety on the other." [10] The economy inherent in shortened words and forms is a phase of the linguistic equilibrium; or, to say it differently, equilibrium and economy in speech are correlated. According to Zipf, phonetic change is "in all probability the means whereby this condition of equilibrium is maintained." [11]

Zipf ingeniously applies his theory even to the question of accents and their shifting from one syllable to another. This, too, is at once an example of economy and of equilibrium.

The external statement of phonetic laws or correspond-

[10] G. K. Zipf, *The Psycho-Biology of Language* (Houghton Mifflin Co., 1935), pp. 47–48.
[11] *Ibid.*, p. 127.

ences is merely the beginning of the problem. It registers data. These data require interpretation. We say that the mind, by repeating certain sounds, stores up mental images of the manner in which our muscles coöperate to make the sounds. No two sounds, however much alike they may seem, are ever precisely the same, or made in precisely the same way. Hence the opportunity for slight divergences that may lead to decisive divergences. Now comes Zipf to reveal, from long and arduous statistical studies of numerous words in many languages, that there seems to be an unconscious, but undoubted, purpose in the sound-changes, in the distribution of long words and short, in the distribution and shift of accents.

An accent is an emphasis upon part of a word. According to Zipf the degree of emphasis varies inversely as the relative frequency of the word-parts; that is, the more often a particular word-part occurs, the less likely is it to bear the accent. Words and parts of words that occur very often are not generally accented. (Consider our words *the, a, from, that, by, was, at, with,* and so on, in their most frequent use.) This applies especially to regular endings in plurals, and in the declensions of verbs. The more common an ending, the less likely is it to bear the accent. There are, of course, accented endings; statistical investigation shows that they occur far less often than endings without accent.[12]

"If comparative philology has been unsuccessful in explaining the reason for the seemingly irrational accentual differences in these declensions, dynamic philology can at least point out that lack of accent was coupled with markedly high relative frequency." [13]

One of the important results of Zipf's investigations should be to establish his theories of economy and equilibrium as a necessary factor in all further phonetic investigation. This economy and this equilibrium are not vocal-mechanical phe-

[12] In this respect, Zipf's examination of the strong verbs in Sanskrit is especially interesting. However, it is not for beginners. (See his Chapter IV, "Accent Within The Word.")

[13] *Ibid.*, p. 139.

nomena; they are not speed-elements, though increased speed of utterance is involved; they are not exclusively mental phenomena. They represent a coördination of the entire psychobiologic being of man. Here, as everywhere else in language, analogy steps in to counteract the more fundamental tendencies. Analogy itself, however, is a kind of economy, a kind of equilibrium.

Dynamic philology is applied by its founder to Grimm's Law, with suggestive if tentative results. It is applied also to the so-called Grassman's Law, which concerns the voiced aspirated stops. The voiced aspirated stops, or *mediae aspiratae,* are represented in our alphabet by *bh, dh, gh; b, d,* and *g* are voiced stops, and the *h* stands for the rough breathing or aspiration. These stops occur in Sanskrit and Greek. Grassman discovered that when two of these voiced aspirated stops occur in the same stem, one of them loses its aspiration. It is of primary significance that the law applies to Greek as well as to Sanskrit, since it is thus proved that the disappearance of one of the aspirated duplications is not attributable to a peculiarity of Sanskrit.

For our purposes it is not necessary to give examples. What is to be emphasized is this: aspirates require more energy than unaspirated syllables, since they call, in fact and by definition, for more breath. Aspirates for this reason occur less often than unaspirated sounds. The disappearance of a duplicated rough aspiration is a measure of economy. Haplology is yet another instance of economy; in this case the reduplication of effort disappears entirely. This cannot be attributed solely to speed of utterance. We do not conserve energy, consciously or unconsciously, only because we are in a hurry. Resistance to reduplicated effort has deeper roots; it is part of an organic economy that is distinct from mere laziness. It has also its æsthetic aspects, since monotony of effort and unvaried attention are equally tedious. We do not like to be *tired* (physical) or to deal with matters that become *tiresome* (æsthetic).

The dynamic philology of Zipf, which I have here suggested very schematically and in most elementary fashion, since it is on the whole for specialists only, reveals a striking unity of application to every element of speech: to word-element, to meaning-element, to complete word, to sentence-structure, to all phases of accentuation, and, as we shall see when we consider the classification of languages, to language-types. It reinforces, with much additional material, the theorem that the relative length of the words we use, the relative length of the sentences we speak, the relative frequency with which endings and declensions occur in language, are not matters of individual caprice but are determined by the dynamics of the human organism.

CHAPTER XII

JANUS WORDS

"An eminent Logician who can make it clear to you
That black is white—when looked at from the proper point of view;
A marvellous Philologist who'll undertake to show
That 'yes' is but another and a neater form of 'no'."
GILBERT and SULLIVAN'S *Utopia, Limited,* Act *I.*

§ 1. STATEMENT AND SUGGESTION

AS SOUNDS CHANGE, SO DO MEANINGS.

As sounds are approximative, so are meanings. As we never make the same sound twice, even when intending to produce, and thinking that we produce, the same sound, so very frequently we pronounce the same word with a delicate shade of difference in meaning that makes it, in respect of that shade, a somewhat different word.

Just as sounds are subtly altered by the mental and vocal adjustments that precede and follow them in the stream of speech, so meanings may be subtly altered by the mental (and, at times, vocal) adjustments that precede and follow them in the stream of emotion and thought.

Words, then, are not definite and unchangeable. They not only state; they suggest. The current meaning of a word is but one of its meanings, and to us, the most important one. Yet words mean more than meets the eye, or the ear. The psychoanalytic school of Freud, in the interpretation of dreams, distinguishes between the *manifest* and the *latent* content of the dream-material. The manifest content is what the dream appears to mean on the surface; the latent content is what lies concealed beneath, requiring skilful investigation.

Words, too, have a manifest and a latent content. They de-

note; they connote. For the ordinary purposes of living, the denotation—the manifest meaning—is enough. Yet why should we feel insulted if someone were to say that we *devour* our food instead of *eat* it? Is it not because we associate the word *devour* with animals? Words carry not only statements, but implications. They have, as it were, shape and color. They speak outright; they also imply.

Words, like other sounds, are not simple. We have learned, in the chapters on phonetics, that sounds have not only tones but overtones. Words, too, in a metaphorical sense, have overtones.

The meaning of a word, then, is not a clear-cut image; it is more like a selection from a number of possible, very similar, images. It acquires definition from its context; alone it is rarely well defined. A word is, in this sense, a focus. It is a blur of meanings, upon which the mind brings its sharp light to play, centering attention upon one selected meaning. To a mathematician, the word *operation* means one thing; to a surgeon it means another; to a stock-broker it means something else again. To one person, in the varied course of a day, it may mean, in succession, all three things, but never at the same time. The nature of our interests, of our requirements, focuses attention upon the meaning that we desire.

Words can change in meaning, then, in much the same way that the sounds composing the words can change—by a subtle and often unnoticed shifting from one delicate distinction to another. Or they may change—again like sounds—by the perception of an analogy.

Consider the Siamese twins and their contribution to our language. The original Siamese twins were Chang and Eng, who were born in Siam of Chinese parents, in 1811, and died in 1874. "They were united," according to the definition in the current edition of *Webster's New International Dictionary,* "between the xyphoid cartilages, by a thick fleshy ligament having the navel on its lower border." The phrase *Siamese twins* entered the language in 1829; within four years the term was being applied to twins of like formation, regardless

of their origin. From the resemblance to the tubular band that joined the Siamese twins we then evolved the verb *siamese,* meaning "to unite (two or more pipes) by a Siamese joint so as to discharge through a single, usually larger, pipe."

The word *Siamese* thus loses, even in the case of the twins, association with the very country that gave birth to it. This has its humorous side. In November, 1936, Lucio Godino, Siamese twin of Simplicio Godino, died; by surgical skill Simplicio was saved. The twins, as their names would suggest, were Filipino, and were born in Manila. Such details do not trouble a press agent. The agent of the Godinos decided that they were Siamese not only in name but in fact. "Look what I'm offering you," he is reported to have said to prospective clients. "Not German Siamese twins, not Japanese Siamese twins—but genuine *Siamese* Siamese twins!"

If words, even at the present stage of linguistic evolution, may yet be so uncertain in meaning, what can have been the state of affairs in the dim past when words were less distinguishable than now from the stream of speech and the stream of meaning?

§ 2. BIPOLARITY OF WORDS

One of the strangest peculiarities in semantics is the word that carries opposite meanings—the bipolar word, or, as I call it, the *Janus* word, since it looks at once in opposite directions. Of this, as we shall see, Freud has made capital use in the elucidation of his theories. The fact itself, however, was noticed and commented upon long before Freud. Indeed, it was through a monograph by Karl Abel, *Ueber den Gegensinn der Urworte (On the Antithetical Sense of Primal Words),*[1] that the interest of Freud was aroused in a subject seemingly quite dissociated from the themes of psychoanalysis.

[1] Published in *Jahrbuch für Psychoanalytische und Psychopathologische Forschungen,* Vol. II, 1910. An abstract is to be found in *The Psychoanalytic Review,* July, 1917. Freud's comments are to be read in the fourth edition of his *Traumdeutung (The Meaning of Dreams).*

See, too, Abel, *Sprachwissenschaftliche Abhandlungen;* also, in English, Abel's *Ilchester Lectures on Comparative Lexicology.*

The Rev. Frederic W. Farrar, in his *Chapters on Language,* written two generations before Abel's monograph, called attention to the phenomenon, for which he did not dream a dream-explanation.

Considering the manner in which words change meanings, he was led to speculate upon words as applied "to things which are *essentially contradictory.*" Thus, the Chinese *louan* means both 'to make a disturbance' and 'to govern things well.' *Ton* is both 'to poison' and 'to nourish.' *Kon* means not only 'a vessel that is worm-eaten' but also to 'mend a vessel.' *Tsing* means 'pure' or 'clean' and also 'a sink.'

In Hebrew, the word for 'he created' means also 'he destroyed.' *Boruch* signifies both 'he blessed' and 'he cursed,' while the word that means, in Job XXIX, 3, 'to shine,' is in Psalms LXXV, 5, 'inglorious.' *Hessed* signifies 'reproach' and 'kindness'; 'infidelity' and 'constancy' are represented by the same combination; *kodesh* is used as attribute for "both the holiest and the most contaminated things"; *tob* "implies both longing and abhorrence." The Hebrew root *abh,* 'to be willing,' means in Arabic 'to be unwilling.' "One word in Arabic means both *to be kindled* and *to be extinguished,* and the same root is used for both *to be righteous* and *to be unjust.* In Sanskrit *bhîruka* means both *timid* and *formidable.* We find similar contradictoriness in the applications of the Greek roots which occur in *ágos, chréia, ápto,* &c., the Latin words *carus, sacer,* &c., the English words *fast, dear,* &c. Thus, too, in Greek the prefix *a* is sometimes negative, sometimes copulative or perhaps intensive; and in German the inseparable prepositions *ent-* and *ver-* sometimes express negation and sometimes not."

Farrar offers a number of explanations, chiefly the law of the association of ideas. "The harmony of the apparent discord is generally discoverable in the history of the word itself. In some cases the word or root which has acquired opposite senses was really a *mésē léxis,* like the Hebrew *Barak,* involving the notion of a solemn address to God, and therefore equally applicable to blessing or cursing; or the Latin *sacer* which means

set apart or tabooed, and therefore is equally applicable to things sacred and things accursed."

Sacer is our word 'sacred,' and the French *sacré*. Many who read Farrar's words will think of the French rule according to which *sacré* means 'damned' when it precedes the adjective and 'sacred' when it follows. Between *sacrée musique* and *musique sacrée* lies the distance between hell and heaven.

There are cases, of course, when not even the law of the association of ideas need be called into account. The Latin *altus* means both 'deep' and 'high.' The meaning is one, really, of relative position. That which, when viewed from above, is deep, when viewed from below is high. *Alto,* as used at present in music, means the lowest of the female voices; formerly it was applied to the highest of the male voices. Altitude is always relative; what is lofty in relation to one height is low in relation to another. Old High German *Ende* meant 'beginning' as well as 'end.' The beginning of some things is the end of others.

The law of the association of ideas, then, explains but a portion of the strange verbal antitheses, unless we include, with association, the phenomenon of dissociation. This, in view of the subject of opposite meanings, is indeed appropriate. For we cannot unlink that which has not previously been linked. Yet there is more to the matter than linking and unlinking. We have seen that euphemism attempted to transform evil into good by naming the evil the good; we have seen that cacophemism sought to control conduct or to avert the jealousy of man and fate by calling the good the evil. In these cases we have the creation, or the utilization, of opposites as a species of magical control.

How closely such a mental process may be connected with the ancient superstition of interpreting dreams by opposites, I do not know. The dream-superstition, like euphemism and cacophemism, seems to point to a relic of the magical period. What shall we say, however, of the custom, among the ancients, of employing the antithetical method in etymology—of explaining words not by their meanings but by the opposites of their meanings?

This process was named, in Greek, *kat' enantiōsin,* or 'naming according to opposites.' Such an approach, while evidencing deep ignorance of etymology, must have been founded upon something less innocent than ignorance. Just what, it is not possible to say, unless the word-theory of Freud sheds a certain light upon the problem. Why was a grove called, in Latin, a *lucus?* Because, said these ancient etymologists-by-opposites, it was a light that excluded light. (*Lucus a non lucendo.*) Why was the sky called *cœlum?* Because *celatum* meant 'concealed,' and the sky was open. Why was war called *bellum?* Because *bellum* meant 'beautiful,' and war was the least beautiful of things (*quod sit minime bellum*). *Aridum* (dry, arid) was supposed to come from Greek *ardeúein,* 'to water,' because that which was arid had to be watered. And so on, for centuries of words and, even more strangely, for centuries of years.

When, in the late 1880's, Herr Abel came to the study of ancient antitheses, he selected the Egyptian language as that containing the only relic of primitive words. "Imagine," he writes, "such apparent nonsense as, for instance, the word 'strong' at the same time denoted 'weak,' the word 'light' also meant 'darkness,' that in calling for beer another would use the same word to call for water; conceive that, and one has the astonishing practise of the old Egyptian language.

"Egypt," he continues, somewhat later, "was everything else but the home of nonsense. On the contrary, it is there that we have the earliest signs of the development of reason. It had a morality which was pure and dignified, and had formulated for itself the majority of the ten commandments at the time when the races now ranking as civilized were in the habit of sacrificing human beings to their bloodthirsty idols. A people which in so dark a period was able to keep the torch of justice and civilization alight, could not in its speaking and thinking have been exactly stupid. . . . How then can we understand the Egyptians allowing themselves such a peculiarly contradictory language?"

The contradictoriness reached into the very composition of the word. For, besides words that had opposite meanings within

themselves, there were words "compounded of two distinct words, the whole word having the meaning of only one of its component parts. In other words, there are in this extraordinary language not only words such as 'strong' which denotes also 'weak,' 'command,' which means 'obedience' as well, but impossible words such as 'old-young,' 'far-near,' 'in-out' or 'out-in,' which, in spite of the opposite meaning of the two parts, only have the significance of one part." Thus, too, in the Berlinese dialect of German, *Janein* (literally 'yes-no) means 'no.' Compare such usages as English "You are coming, are you not?" or even, "You are coming,—no?" In these cases, despite the negative, the answer *yes* is clearly expected. Inversely, "You don't mean it, do you?" anticipates a *negative* reply. They thus differ from similar formations in the Chinese, for in the Chinese the two contradictory elements unite to form a third meaning, whereas in old Egyptian the first of the antithetical elements gives its meaning to the combination. Chinese, however, has also *khing tschung,* meaning 'weight,' and composed of two terms that signify 'light-heavy'; distance is *ywan-kin,* 'far-near.'

For this, Abel advances a theory that may be more than plausible. We know what light is, he avers, for the same reason that we know what darkness is. Each assumes the existence of, and is defined by contrast to, the other. Words, like so many other things, are relativities. They achieve independent meaning only by being contrasted with, separated from, other things and qualities. To conceive of strength it is necessary to conceive, too, of weakness. The old Egyptian words, then, do not express positive, absolute meanings so much as they express relationships. *Strong-weak,* as a word-formation, would mean something like "the relationship of strength and weakness, of which, in this instance, the element of strength is to the fore."

The theory of Abel throws light, too, upon the Egyptian use of the so-called "determinative." Egyptian writing was at first, like perhaps all other systems of writing, pictorial; when it became ideographic (that is, with the pictures suggesting ideas) the chance for ambiguity was great, especially when the same

sound could contain opposite meanings. *Ken* meant 'strong'; *kan* meant 'weak.' In order to guard against misunderstanding, when the first of these similar sounds was written, there was added the picture of an armed man, standing erect, to reinforce the notion of strength; when *kan* was used, there was added the picture of a weary, seated figure, to reinforce the notion of weakness. It will be observed that by this time the language had advanced to a stage in which the paradoxical word had been split into two forms, each differentiated from the other by a dissimilarity of vowel: *ken, kan.* In writing, side by side, we find the ideograph (the picture-symbol) and, as a determinative, the pictograph (the picture-representation). The use of the determinative in writing, as an aid to the meaning, has been compared to the use of gesture to complete the meaning of speech.

Abel quotes Bain on Logic: "The essential relativity of all knowledge, thought, or consciousness cannot but show itself in language. If everything that we can know is viewed as a transition from something else, every experience must have two sides; and either every name must have a double meaning, or else for every meaning there must be two names."

Carnoy says, likewise, "It is an essential principle of semantics that the sense of words is established, or at least confirmed, by opposition to others." He observes, too, that "Children also generally begin by using the same term for heat and cold." [2] Jespersen reports that children confuse words like *to-morrow* and *yesterday,* and that they have been heard to say *next time* when they meant *last time.*[3] The Gothic *gistradagis,* which gives us *yesterday,* and the German *gestern,* actually meant 'to-morrow.'

Latin *luere* meant both 'to wash' (*ablution*) and 'to pollute.' Chinese *mai* means 'to buy' and 'to sell'; *shem* means 'to acquire' and 'to give.' Our *host* means both the *host* and the *guest;* these are two forms of the same original word, *hostis,* which means, in Latin, 'enemy.' Greek *xenós* has a similar

[2] A. J. Carnoy, *La science du mot,* p. 191, and p. 291.
[3] Otto Jespersen, *Language: Its Nature, Development and Origin,* p. 120.

double meaning of both 'stranger' and 'guest'—a stranger is a possible enemy; he is also a possible guest.[4]

Among the other examples brought forward by Abel are such as Latin *clamare* (shriek) and *clam* (quiet); *siccus* (dry) and *succus* (moist), in which the change in vowel has a semantic significance, analogous to the change from *ken* to *kan* revealed in old Egyptian. German *Boden* means, to this day, 'the top of the house' as well as 'the lowest part.' *Böse,* 'bad,' has its opposite in *bass,* which is Old German for 'good.' Old Saxon *bat,* 'good,' develops into English 'bad'; English *lock* has its etymological analogue in German *Lücke,* 'a hole'; in German, *kleben* is 'to stick,' in English it is 'to cleave,' which is itself ambiguous, since it means at once to adhere and to split apart.

In our own tongue, as in the ancient Egyptian, the contradictory elements may compose a single word, as in *without: With* is, of course, an inclusive element; *out,* an exclusive. In a phrase that has become humorously popular, and that has been attributed to the moving-picture producer Sam Goldwyn, renowned for his so-called Goldwynisms, the ideas of exclusion and inclusion have been telescoped. "Include me out!" he is said to have exclaimed, upon learning of a proposal to which he could not feel friendly. The phrase is less paradoxical than it sounds, although it is hardly to be recommended as a model of expression. There has been an ellipsis—a jump in thinking. What the speaker had in mind was something like this: *"Include me* upon the list of those who prefer to stay *out* of this venture."

To return to *without: with* alone at one time indicated not only conjunction but separation. It is akin to Middle English *with,* meaning both 'with' and 'against'; to Anglo-Saxon *with,*

[4] In this connection it is curious to report the experience of Johnson O'Connor, director of the Human Engineering Laboratory in Stevens Institute of Technology, Hoboken, N. J., who tested 20,000 persons, chosen from all the strata of society, for their use of words. The commonest error, he found, according to an article in *Time* (January 3, 1938, p. 32) was the "confusion of words with their opposites. Thus *neat* is the commonest misconception of *untidy,* and 52 per cent of Mr. O'Connor's subjects thought *enervating* meant *invigorating.*" The confusion of *enervating* with *innervating* is quite excusable; that of *neat* with *untidy* is, on the other hand, rather disconcerting.

'against'; to Old High German *widar* and modern German *wider,* meaning 'against'; also to German *wieder,* meaning 'again.' Ultimately it may go back to an Indo-European word meaning 'asunder' (cf. Sanskrit *vi*). In such words as *withstand, withhold, withdraw,* the original meaning of opposition or separation is still clear. In Anglo-Saxon, *wid* meant, in addition to 'against,' also 'toward' or 'opposite.' This is not so strange as it appears; just as *altus* could mean 'high' or 'deep,' according to the point of view of the beholder, so one walking *toward* me may be walking *away from* you. *With* contains the essential significance of contact; contact may be for the purpose of association or of struggle.

§ 3. AMBIVALENCY

To Freud, commenting upon the monograph of Abel, the significance of the verbal antithesis lay deeper than language or than orthodox psychology. He had in mind more particularly the element of paradox in the human psyche: the coexistence of such contradictory feelings as hate and love. To this paradoxical state Freud had given a name suggested by the vocabulary of chemistry. He called it *ambivalency.* So doing, he created a new word out of an old one, just as truly as the early Christians, out of the vocabulary of the pagans, created new words without creating new sounds. The word was so new, indeed, that the 1930 edition of *Webster's New International Dictionary* lists it among the New Words, at the beginning of the volume.

There, *ambivalency* (Latin, *ambo,* 'both,' and *valency,* or *valence*) is defined as "the quality or fact of being ambivalent"; specifically, in psychology, "the presence of contrary feeling tones, associated with the same idea or object." *Ambivalency* is not to be found in the vocabulary of chemistry, but *valence* is.

To Freud, then, the manner in which primitive words could have simultaneous opposite meanings was surprisingly like the manner in which dreams were built up in the psyche. This

process, in Freudian language, is called "the dream work." What we may call "the word work" seemed to run parallel with "the dream work," suggesting to the great Viennese investigator that there must be a close relationship between the dream process and the linguistic process. I dare say that from the time of the fourth edition of Freud's *Traumdeutung* dates the new interest of psychoanalysts, and even of neurologists, in language. That interest had always been latent; much work in the understanding of mythology, indeed, had been done (and overdone) by the early linguists, especially at the time when the discovery of Sanskrit seemed to provide the open-sesame to the secrets of philology. It remained for Freud and his followers, however, to link the verbal data with the psychic, and to attempt to reveal, in the structure of primitive words, a pattern of emotional paradox.

Against such attractive applications of theory we should be on our guard. It is possible, indeed, to reverse the process: to see whether the linguistic fact can be applied to the psychological, and whether, behind both, there is not a third inclusive principle. For example: in the case of the contradictory meanings of *with,* we have seen that behind the contradictions is a fundamental meaning of *contact,* and that in such a fundamental meaning the semantic opposition is, as it were, reconciled, or logically explained. If love and hate do coexist in the human breast, may they not be (like certain words) paradoxical evidences of a single root-idea? *Eros* (Greek) is the God of Love; *Eris* is the goddess of hate. Can there be a symbolism in the vast change wrought by a vowel? Perhaps that root-idea represents possession; love would then result from successful possession or the promise of possession, while hate would result from failure to possess.

I do not offer this as psychology; I offer it as a suggestion that much of what looks to us like contradiction, whether in life or in language, may be in reality a single aspect of a condition that has many facets. Somewhere in Spengler's volumes on *The Decline of the West* is a statement that to a plant there is no front nor back nor side. That is, the stem of the plant being

tubular, it everywhere faces forward. What is the top (or bottom, or side, for that matter?) of a perfect sphere?

We must be on our guard, too, against words that sound alike (*homonyms*) but are phonetic developments from words that originally had no etymological connection. *Let,* for example, means both to *allow* and to *hinder;* each of these meanings, however, is derived from a different verb. The phrases *settle down* and to *settle a bill* do not employ the same verb. The first is from Old English *setlen,* 'to seat oneself'; the second is from a dialect form, *sattle,* meaning 'to appease,' 'to pacify,' 'to put an end to a quarrel.' [5] Bill-collectors and debtors must have been even more insistent in the old days than they are to-day, for our word *pay* itself has a derivation similar to that of *settle* in the financial sense; it comes from Latin *pacare,* which itself comes from *pax, pacis* (peace). To *pay,* like to *settle,* is to *pacify!*

Abel, in his monograph, comments upon the Egyptian habit of reading words backward and of giving to both arrangements of letters the same meaning. The inversion of the letters, he says, occurs too often to be explained by coincidence. Similar inversion is found in the Semitic and the Aryan tongues. As examples of such inversion are adduced *boat* as an inversion of *tub, hurry* as an inversion of the German *Ruhe* (rest), *club* as an inversion of the German *Balken* (in the sense of stick or cudgel).

The matter of inversion recalls the humble Jewish vendor of sweets on a New York street. He knew no English; Yiddish, like Hebrew (the characters of which it employs) is written and printed from right to left. The vendor, at first displaying only a Yiddish sign, decided to go in for advertising in English. Accordingly, one morning, the passers-by gazed upon a sign that read: "HCAE ¢ 1." He had learned how to spell the important English word, but he had not learned that English was written from left to right.[6]

[5] See the extremely valuable monograph, *The Folk and Their Folk-Lore,* by A. Smythe Palmer, pp. 169–170.

[6] The instance is not imaginary. See *The New Yorker,* August 7, 1937.

It would be easy, in ignorance of the simple facts, to construct a complex theory upon the reversal of the letters.

As to the "inversions" *hurry-Ruhe, tub-boat,* and that type, extreme caution must be employed in accepting merely ocular or orthographic evidence.

Boat is akin to a cluster of words that reveal a strong family resemblance in many tongues. *Tub* reveals a like multiplicity of kinship, but not to the *boat*-family. *Tub* has cousins in Middle English *tubbe,* Low German *tubbe,* Dutch *tobbe,* German *Topf,* and perhaps the Latin *tubus,* a 'tube' or 'pipe.' *Boat* has cousins in Middle English *boot, bat,* Anglo-Saxon *bat,* Dutch and German *Boot,* Icelandic *batr,* French *bateau.*

Among the linguistic antecedents or relatives of *club* you will not find *Balken* in the English dictionary. You will find Middle English *clubbe* or *clobbe,* German *klumpen* (clump) and *kolben* (club), Icelandic *klubba, klumba* (club).

In his *Ilchester Lectures* Abel offers examples of Egyptian words in which the sound is inverted, in which the sense is inverted, and in which both sound and sense are simultaneously inverted; I present a few examples, in simplified phonetic form:

Inversion of Sound:	*ab* or *ba,* stone, wall
	am or *ma,* equally
	an, na, catalogue
	ar, ra, to make
	kolp, polk, destroy
	peh, hep, to go
Inversion of Sense:	*aft,* to jump and to rest quiet
	tua, to honor and to despise
	terp, to take and to give
Inversion of Both Sound and Sense:	*kar,* wise; *rak-a,* stupid
	at, tie; *ta,* to cut
	pesh, divide; *sheb,* join
	mes-i, darkness; *sem,* to become visible

CHAPTER XIII

HOW MEANINGS CHANGE

> Innumerable words are thus like rivers, which once pouring their waters through many channels, have now left dry and abandoned them all, save one, or . . . two. TRENCH, in *A Select Glossary of English Words.*

§ 1. THE "LIFE" OF WORDS

BETWEEN CHANGES IN MEANING AND CHANGES IN SOUND there is not necessarily a direct relationship. Of course we distinguish between verb-forms and noun-forms that sound alike (*prógress, progréss*) by usually accenting the noun on one syllable and the verb on another. When the average word changes in meaning, however, the change is attributable not to phonetic development, but to new conditions in the environment and in the mind. *Alms* has retained its meaning despite its long evolution from the Greek *eleemosyna. Angel,* although it still looks much like its Greek etymon (*angelos*) is a far different word, in meaning, from its Greek etymon. Anciently the Anglo-Saxons pronounced the word for 'house' with the vowel sounding like our long *u; hús* rhymed with such a word as our *moose.* We say *house,* but the word still means a dwelling.

All things flow, said Heraclitus. Language flows with life, but at a slower tempo. Our vocabulary is always behind our actualities. This might be called, by analogy with the "cultural lag" in social studies, "linguistic lag." Our chief conveyances, before the introduction of the locomotive, were coaches. We still call the components of a train by that name, just as a Pullman sleeper, in France, is a *wagon-lit*—literally a 'bed-wagon.' Language, for all its scattered profuseness, is also an economical function. It does not hesitate to use, for new things or ideas,

old words, and to spread those words as wide and as thin as is consistent with understanding.

Do words have an independent life? Do they, as one French philologist has said, follow their respective destinies all by themselves? That is, do they develop quite apart from the conscious desires of those who use them? Or are they determined, so far as meaning and change of meaning are concerned, by the thoughts and desires of mankind? Similar problems occupied us when we considered words as sound.

There has been some to-do about such a phrase as "the life of words." At least two excellent books, one by Darmesteter, the other by Nyrop, have been written—the first in French, the second in Danish—with that title. I doubt that the metaphor of word-biography is seriously objectionable. Words live only as they are spoken or written. They enter a language in response to a need; they disappear, either suddenly or gradually, when they are no longer needed. Their "life" consists in the measure of their necessity to the language. Words for ancient implements or techniques go out of the language when the implements or the techniques for which they stand go out of social life. *Clavichord* was once a new word; it has been replaced by *piano* because the piano as an instrument replaced the clavichord and the harpsichord. *Piano* itself was first *pianoforte* (i. e., Italian for *soft-loud*), because the distinction of the new instrument was its control of tonal dynamics. Abroad it was called also *Fortepiano.*

As in phonetics, so in semantics, the answer to the problem about consciousness of change must be double. There are changes that are conscious; there are changes that are unconscious. When a new word such as *pianoforte* is introduced, it is a conscious formation on the part of someone—a primary change; with the growing popularity of the instrument, the word wins currency, and is adopted by the general public—a secondary change. On the other hand, many changes in meaning are so gradual as to happen without the awareness of the speakers in whose minds and mouths the change is taking place.

Words thus expand in meaning, or they contract; they "degenerate" in meaning, or they "advance"; their meaning becomes either more intense, or less.

A company seeks a name for a new type of ice-cream stick. The stick combines chocolate fudge with ice-cream. It is christened, very self-consciously, *fudgicle* (*fudge* plus *icicle*), by much the same telescoping process that produces *brunch* out of *breakfast* and *lunch*. To the child asking for a *fudgicle,* however, *fudgicle* is as much a word as *ice-cream cone.*

During one of the flood scares of 1937 an announcer—this one was speaking from a station in Boston, once the Athens of America, and across the narrow river Charles from Harvard—went out himself like the dam and, seeking a figure of speech that should convey adequately the rush of the element, roared about "the cavalcades of water" that were flowing over the bridge.

Let's take a look at this word *cavalcade*. For, through its ending, *-cade,* it is creating, under our very noses (or, ought I to say, outside of our very ears), a number of new formations. A *cavalcade* is, properly speaking, a band of horsemen. Although Latin had a respectable word for horse, *equus,* the word was gradually replaced in common speech by *caballus,* which stood for an inferior type of horse. *Caballus* itself came from Greek *kabálles*. It is the ancestor of the Spanish *caballo,* the Italian *cavallo,* the French *cheval.*

I suppose that if one were speaking poetically, one might try to defend "cavalcade of water" as an image suggesting the resemblance of flood waters to a troop of wild horses. The announcer did not have this in mind; he was using *cavalcade* to mean an enormous amount. He was not thinking poetically, any more than were the gentlemen of the press who have given us *motorcade* and *aquacade. Motorcade,* I suppose, is a procession or line of motor cars. Or is it a motor race? *Aquacade* is a place for a water race. Now, why should the ending *-cade* suddenly come alive to provide a few dubious English words, especially when *cade* is not an ending at all?

If we see how we get the *cade* we shall understand better the

devious workings of language. In Italian, *cavalcare* means 'to ride a horse,' 'to go on horseback.' From the past participle of this word, *cavalcato,* was made a noun, *cavalcata,* meaning quite the same as our *cavalcade.* (Such a usage as *Cavalcade* in Noel Coward's play of that title is, of course, figurative, and means the procession of the years, as if they were so many horsemen trooping by.) Our *-cade,* then, is a past participle ending; more exactly speaking, *ato* is the past participle ending. The Italians, and not they alone, used the feminine form, *ata,* to create an ending with the significance of *group. Cavalcade,* at best, is not to most speakers of English a common word. If, loosely, the ending *-cade* suggests a group, why should it not be used to suggest any action in which a group engages? An *aquacade* thus becomes an aquatic race; if we were sticklers for forms, it would have to mean something essentially meaningless: a parade of water. So that *aquacade* in the sense of a place for a water race—a glorified swimming-pool—is quite as funny as "cavalcades of water roaring over the bridge." Pretty soon we'll be having *scholarcade* for a group of pupils; *cinemacade* for a moving-picture contest, and only the good Lord, and perhaps Mr. Vizetelly, can tell where it will end.

The latest adaptation of an old ending to greet my ears comes likewise from the radio. Announcers of sophisticated musical programs, especially, seem hard put to it to find new slang terminology for their offerings. A piece is no longer played; it is *styled,* and the player becomes a piano *stylist.* Is it any wonder, then, that the piece itself ceases to be a piece and becomes a *tunescape?* The word is formed on the analogy of *landscape;* if we have *seascapes* and *landscapes,* why not *tunescapes?*

The ending *-scape* in landscape is the same as the *ship* in the words *friendship, fellowship, hardship.* It is akin to the word *shape* in the sense of to *do* or to *create.* It denotes varying aspects of quality. *Tunescape,* then, would bear the same relation to music that *seascape* bears to the ocean and that *landscape* bears to terra firma. The man who coined it need not have been an etymologist nor a semanticist; he was working on

the basis of analogy—a powerful unifying influence in every phase of speech. At the moment *tunescape* has the status of a *nonce-word*—a word coined for the occasion; if a few people take it up it may become a *neologism*—a new manner of speech; if many take it up it may enter the language of everyday.

In the same way, as words drop out of usage, they become *obsolescent* (that is, Latin *ob,* a prefix meaning in this case something like 'against,' and *solere,* 'to be accustomed to doing a thing'; therefore, 'falling out of use') or, if entirely dropped, *obsolete.* If consciously restored, ancient words are called *archaic.* (Greek *archaikós,* 'ancient,' from *archḗ,* 'the beginning'.)

When a word changes in meaning it must mean either more than it meant before or less; or it must refer to something altogether different from what it designated formerly.

§ 2. ROMANTIC VS. CLASSIC—WHEN KNIGHTHOOD WAS IN FLOWER

The word *Rome* is associated in our minds with the seat of Classicism. The word *romantic* describes the opposite of those principles of thought and action that are concentrated in the classic outlook upon life. How does it come that the word *Romanticism* thus rises from the symbolic seat of Classicism?

Rome received its name from the legendary Romulus, who, with his equally legendary brother, Remus, had been rescued from the Tiber. Mars was their father; Romulus, like another Cain, slew his brother, and became first king of the city named after him. *Roman,* as an adjective formed from the name of the city, is an obvious development. But it is not the only adjective possible. A glance at the dictionary discovers such widely differing terms as *Romic, Romaic, Romish, Romanic, Romanish, Romanesque,* and each of these designates a particular element of the Roman civilization, or a development from that particular element.

Romanesque is applied chiefly to a type of architecture after the Roman and before the Gothic style. It may also mean—through the French—romantic. *Romanic* carries a linguistic

connotation; by some it is preferred to *Romance* as an adjective denoting the languages that grew out of the Roman (i. e., Latin) speech. *Romanish,* like *Romish,* carries a derogatory feeling, in which may be sensed the animus of religious controversy. *Romaic* refers to modern Greece and its vernacular, for the Greeks, when Constantinople was captured, had become proud of calling themselves Romans.

The wide divergence in the meaning of the various adjectives based upon the name of Rome is sufficient to attest the central importance of the city to the history of the world. In language, law, religion, art—even physiognomy (*Roman nose*) —it has become an ineradicable part of the world's vocabulary.

Yet how does *romantic* come to mean *unreal, fantastic, imaginative, subjective,* as opposed *to real, ordered, classic, objective?* Why did it shift from this derogatory meaning in the seventeenth and eighteenth centuries to one of honor in the nineteenth? Why, to-day, is it trembling on the verge of demotion once again?

The adjective *romantic* appeared in English for the first time in 1659. H. More, in *The Immortality of the Soul,* used it as applied to "that Imagination which is most free, such as we use in *Romantick Inventions.*" Something *romantic* was something that seemed to come out of a *romance,* or, as we should say, a novel. But why is a novel called a romance?

The Latin of the common people, as distinguished from the Latin of the standard writers, was the tongue from which evolved the Romance languages. Since the commoner, in Latin, is a member of the *vulgus,* or multitude, we term the language employed by him Vulgar Latin—that is, the Latin of the horde. The Latin version of the Scriptures made by Jerome toward the end of the fourth century is called the Vulgate, because it is *commonly* used in the Latin Church.

The language of the commoner differed from the classical tongue in accent, vocabulary, pronunciation, scope. He was said to speak *romanice*—in the Roman tongue, or, as we should say, in the vernacular. In French, the word *romance* evolved from *romanice,* and in French, too, there came to be written a

type of fiction dealing with wild or impossible adventure. The language gave its name to the product and its type; wherefore today a novel of a certain type is, among us, a *romance*. That which happens in such a novel is called *romantic*.

An age that prides itself upon its reason will frown upon the romantic. An age that cultivates the dream, the vision, the distant, the uncertain, the emotional, will erect it into an ism. Romanticism, however ill-suited the name may appear, is one of the fundamental human attitudes towards existence. It is forever opposing—and being opposed by—the spirit of classicism, of science, of realism, of objectivity. It begins in the name of a legendary twin; it ends as the name of a human category. It is by such accidents that language grows.

The terms *romantic* and *classic* daily become less satisfactory to writers and thinkers who wish to establish clear distinctions. Sometimes it happens that those in authority use them, for effect, in senses that seem to exchange force. Bach, for example, is ordinarily thought of as a classic composer; Wagner, similarly, is thought of as a romantic. The English critic Terry, who has specialized upon the Bach family, may nevertheless write of Bach as "an incorrigible romanticist," while Lawrence Gilman, long established as a Wagnerian rhapsodist, may just as calmly refer to Wagner as "essentially a classicist."

What is amiss? Are Terry and Gilman wrong? Or have the words *classic* and *romantic* become too flexible to mean anything precise in literature and music?

The truth is that the words have become too pliant. In the hands of an expert they may still yield valuable meaning. Certainly Terry knew what he was talking about when, in the desire to reaffirm the deep reservoir of passion and emotion in Bach, he labeled him "an incorrigible romanticist." For the word *classicist* has come to suggest not only one to whom form is as important as substance, but one to whom that form becomes a cold standard of perfection, ruling out the more emotional element in art. Terry, by using the word *romanticist* to

describe Bach, suggests with dramatic force the idea—obvious to all true appreciators of music—that Bach was no frigid formalist, but a composer with warm and profound human intuitions. And certainly Lawrence Gilman, when he called Wagner "essentially a classicist" (though some would wish qualification of that "essentially"), knew equally what he was talking about. For by the use of the word *classicist* he suggested, with dramatic force, the idea—again obvious to all true appreciators of music—that Wagner, far from being only a musical hothead, lacking in formal discipline, was a genius in technical construction and tonal design.

It would be a mistake to look upon this concern with the fundamental, or shifting meanings of *classic* and *romantic* as the impractical concerns of a scholar. They have a definite application to the problems of the man in the street, as well as to the problems of the man in the study.

One of the errors at the bottom of the opposition between *classic* and *romantic* is the very notion that they are necessarily opposed. Observe how the meanings become confused. The Classics, with a capital C, are certain writers of antiquity; the word *classic,* then, acquires a connotation of ancientness. The Romantics, with a capital R, are certain writers of the nineteenth century; the word *romantic,* then, acquires a connotation of modernity. *Classic* suggests old; *romantic* suggests recent. Classical writing suggests a marked attention to formal characteristics; romantic writing suggests a marked preoccupation with matter. The contrast between the terms could be continued for pages; it occupies, indeed, a library.

One result of all this discussion has been to stand the words on opposite sides of the critical field, like two hostile armies arrayed for eternal battle. However, as we have seen, there are important moments when they insist upon fraternizing, and even upon exchanging uniforms. Thus, too, it has happened in the history of the American political parties that the designations Republican and Democrat have crossed over to the other side, and that what we now call Democrat would have been called, in Jefferson's day, Republican, and *vice versa.*

The existence of two different words does not inevitably mean the existence of two utterly different things. In the case of *romantic* and *classic,* the apparent opposition of meaning has helped to confuse thought in music and literature for many years, and it will doubtless contribute for many more years to such an unnecessary and harmful confusion. For one thing, it has supported the pigeonhole method of criticism, in which labels take the place of knowledge. *Classic* and *romantic,* as employed in the arts, are words that were established before the new, rich contributions of modern psychology; we need, and need badly, a terminology that shall make use of these new contributions, and that shall not require—as *romantic* and *classic* now do—a constant translation into more specific language. When it is possible, without exaggeration, to call Wagner at once classic and romantic, to call Bach at once romantic and classic, to call Thomas Hardy at once a classical and a romantic figure as a novelist, it is a sign that the vocabulary of criticism may well undergo a thorough renovation.

Classicism is derived ultimately from *classis,* which signified 'a host,' whether of soldiers or of sailors. King Tullius, writes F. L. Lucas, in that excellent work *The Decline and Fall of the Romantic Ideal,*[1] divided his citizens into five grades, "according to the arms they could afford. The richest, providing the cavalry and the heavy-armed phalanx (*classis*); the rest were *infra classem.* But *classicus* is not transferred metaphorically to writers until, seven centuries later, under the Empire, Aulus Gelius contrasts *classicus scriptor* with *proletarius*—'a first-class, standard writer' with 'one of the rabble.' At the Renaissance the fact that the 'standard' writers of Greece and Rome were read *in class* at school seems to have helped by confusion to produce that other sense of 'classic,' as applied to any Greek or Roman writer, whether first-class or not. Thus 'classical,' meaning 'standard,' dates, in the *Oxford Dictionary,* from 1599 ('Classical or Canonicall'); meaning 'Greek' or 'Latin,' from 1607 ('classical Authors'). Thence the epithet adapted

[1] F. L. Lucas, *The Decline and Fall of the Romantic Ideal* (The Macmillan Company, 1936), p. 19.

itself to anything supposed to conform to the standards of classical antiquity."

A classic, to-day, is not only a writer or a work belonging to Græco-Roman antiquity. It may be, especially on the typewriters of newspaper reporters, and in the mouths of radio announcers, nothing more ancient than an important football game. In the vocabulary of the younger and the sportier set, anything or anybody of distinction has *class*. A girl with an air or in a tasteful costume is *classy*. Surely *classy* is the least *classical* of words; but they are sisters under the etymology.

The conception of chivalry, originally, was linked to the ownership of a horse. Perhaps the fact of ownership was more important than that of the animal. There is nothing especially disgraceful about walking, yet in all ages, it would seem, the man afoot has been below—socially as well as physically—the man on horseback, or in the carriage or in the automobile. The very noun *pedestrian,* meaning one who walks, has become an adjective signifying of lesser merit. We speak of *pedestrian prose*.

A *footman* is a menial, who has to use his feet if he would get anywhere. A footman is also the private in the ranks. The more familiar term, as opposed to cavalry (i. e., men on horseback), is *infantryman*. Why is a member of the infantry named after the babe in arms? An infant, etymologically, as well as biologically, is a creature who cannot speak. He is inferior. The infantryman was inferior to the man on horseback, the knight. *Knight* itself is a peculiar word, since, for all its nobility in our own tongue, it is akin to the German *Knecht,* which means 'vassal,' and Anglo-Saxon *cniht,* 'a youth.' Superiorities and inferiorities are relative; the knight serves the King, the infantryman serves the Knight.

We are thus brought back to the distinguishing property of the knight—a horse. The horse, as we have seen, was not only *equus,* whence *equestrian;* he was *caballus,* whence, in French, *cheval*. The owner of a horse was a gentleman; ownership was a social distinction. In Carlyle's day the man who sported a

horse and carriage was a "gig-man." The distinction, in an age not yet characterized by mass production, was greater than that now conferred by the possession of an automobile. Hence the word *chevalier* to mean a gentleman, and the word *chevalerie* (chivalry) to mean the code of Knighthood. It was as if, in our own day, we had used the word automobile for a similar formation; *automobilary*. Or had used, as a word for gentlemen, the term *automobilier*. In German, *Ritter* once meant only a *rider*. Because, however, if wishes were horses, beggars would ride, *Ritter* came to mean, like *chevalier,* a knight.

The man of superior social station sometimes betrays a "superior" attitude. We call it haughty; *haughty* itself is from the French *haut,* meaning 'high'; *superior* is Latin for 'upper.' A haughty person is *superior* and *uppish*. Hence, too, the adjective *cavalier* meaning uppish, condescending, haughty, "snooty." Why "snooty"? Because he raises his snout, as if scarcely able to see us. So, too, we con*descend* when we let ourselves *down* to the level of our inferiors. The man above us is *on top;* we, below him, are the *under-dog,* the *underling*. He who treats us in *cavalier* fashion is—historically, etymologically and psychologically—looking down at us humble pedestrian beggars from the vantage-point of horseback. If our wishes were horses, we would ride. In one phrase we sum up the cavalier attitude, prettily uniting the height with the animal: "Get off your high horse!" In the Gombo tongue (the French Negro dialect of Louisiana) there is an illuminative proverb: *Metté milâte enhau choual, li va di negresse pas so maman* —Put a mulatto on horseback and he'll tell you his mother wasn't a Negress.[2]

§ 3. HEBREW-CHRISTIAN INFLUENCE UPON THE ENGLISH VOCABULARY

That it is life which pours meaning into words is a truism; yet of certain truisms it is useful to be reminded now and again.

[2] Edward Larocque Tinker, *Gombo, the Creole Dialect of Louisiana* (American Antiquarian Society, Worcester, Mass., 1936).

Important events in the history of a nation, or of the world, often change forever the significance of a word—that is, if the word survives the event. It is part of that economy which seems to be one of the constant traits of language; old words are put to new uses whenever it is possible. The coming of Christianity, for example, was a cataclysmic event; not an event, to be precise, but an historic era that, in altering the psychology of vast areas of the civilized world, produced a corresponding alteration in a large cluster of words.

Trench, in his epoch-making book *On the Study of Words,* which first appeared in 1851, might have been expected, from his high position in the church, to be especially sensitive to this aspect of his labors. As there was a time when the world was young, so there was a time when such vital words as *Christian, Trinity, Catholic, canonical, New Testament, Covenant, Gospels, monk, nun, transubstantiation, limbo,* and others of similar connotation were new in the sense that today, to us, they are old.

"The disciples," we learn in the narrative provided by Saint Luke, "were called Christians first in Antioch." (Acts xi, 26.) "What light it throws on the whole story of the apostolic Church," comments Dean Trench, "to know where and when this name of 'Christians' was first imposed on the faithful; for imposed by adversaries it certainly was, not devised by themselves, however afterwards they may have learned to glory in it. . . ." Trench comments also upon the curious construction of the word: for, although it is Greek and was coined in a Greek city, its termination is Latin. *Christianós* has the Latin ending that we find in Rom*anus,* Alb*anus* and words of that type.

As for the name having been invented by those hostile to the emergent faith, this is not an uncommon origin for words later accepted as a badge of proud distinction. The term *Methodism* was first applied to the followers of John and Charles Wesley in derision. It dates from 1729, in which year was founded, by these and others, at Oxford University, a religious association devoted to the Wesleyan interpretation of Chris-

tianity. The word *ideology,* without which, it seems, discussions of current economic problems could not be carried on, meant at first the science of ideas; it was thus named, according to Webster's, by Destutt de Tracy (1754–1836). As applied to a special system of ideas, however ("the Marxist ideology," "the Fascist ideology"), it was first used in a derogatory sense. For that matter, the suffix *-ism,* which in these days of conflicting ideologies is even less to be dispensed with than is the word ideology itself, is still generally used in a disparaging sense, except by the person subscribing to the particular *ism* in question.

The rich associations of the word *monk* go back, etymologically, to the Greek *monachos,* from *mónos* (alone). The central idea of *monk,* then, is hermit-like solitude; the rich associations of *solitude,* for that matter, are derived etymologically from Latin *solus,* 'alone.' *Nun,* unless it is a child word, is of uncertain origin; it comes from the Greek *nónna, nónnos,* whence the Latin *nonna, nonnus,* 'nun' and 'monk,' respectively. It is one of the freaks of language that in old slang the word *nun* should have meant prostitute; yet not so freakish, when we remember the ironic nature of some slang. The word *Dirne,* German for 'servant-girl,' has suffered like debasement and won even greater exaltation: it means, at one extreme, also prostitute; at the other, the Blessed Virgin Mary. The possibility of such violent contrasts is inherent in the core of the word. The antithetical uses to which it has been put do not point, necessarily, to blasphemy or irreverence. A *Dirne* is, after all, a maid. She may be a serving-maid; she may be a maid who sells her favors; she may be The Maid.

Renan, in his work upon *The Apostles,* has said of the early Christians, "They were deficient in language. Greek and Semitic equally betrayed them. Hence the enormous violence that nascent Christianity did to language." This violence, however, is chiefly a quality seen in retrospect by a linguistic purist. The Christian of to-day, unless he be a word-conscious student, does not feel any violence to language when he uses words turned

from their original meanings in Hebrew or Greek or Latin to the needs of a later worship.

Words such as *idolater* or *Saviour,* in the Christian sense, could not have existed among the peoples from which Christianity took the shell of those words, to fill them with a new content. An idol-worshiper is not likely to invent a word for idol-worship. For, to him, his idol (Greek *éidōlon,* an 'image' or 'phantom') is not, in the modern sense, an idol. It has been transformed, by Christianity, into an *idol,* into a *false* god. The Greek idolater (*eidolátrēs*) is what we should call a worshiper, in no disparaging sense; the disparagement is that read into it by Christianity. In the same way, such names as *heathen* and *pagan* are bestowed by those hostile to the pagan and the heathen.

As for *Saviour,* it was Augustine who, with linguistic shrewdness, observed that if *Salvator* (Saviour) had not been good Latin before the coming of the Saviour, it had been made such by His coming. That is, a new dispensation demanded a new word, or, better still, a new meaning for an old one, or for one built upon an old form. Other such words, as Trench points out—words that acquired from the conditions of the new belief a new content—are the Latin series 'carnal' (from *carnalis*), 'compassion' (*compassio*), 'deity' (*deitas*), 'passion' (*passio*), 'revelation' (*revelatio*), 'tribulation' (*tribulatio*). "Many of these," he adds, "may seem barbarous to the Latin scholar, but there is hardly one of them which does not imply a new thought, or a new feeling, or the sense of a new relation of man to God or to his fellow-man."

The original, and still the central, idea of the word *prodigal* is that of extravagance or wastefulness. To most speakers of English it occurs in a single context, the story of the Prodigal Son (Luke xv, verses 11–32), who "wasted his substance with riotous living." This is in accordance with the Latin etymology. The term goes back to the verb *prodigere,* which in turn is derived from *pro* (in compounds, *prod*) and *agere;* therefore, 'to drive forth,' or 'to squander.'

In the newspapers, however, the tendency of the word *prodigal* is to acquire the meaning of runaway child. Any dissatisfied youth who leaves the parental roof and is thereafter apprehended by the law, or induced to return by measures less official, is labeled a prodigal. The emphasis is thus shifted from the wastefulness of the Biblical son, who had asked for and received his portion of the paternal wealth, to the less essential fact that he had "journeyed to a far country" to do his wasting. The Prodigal Son, moreover, returned willingly to his father, a sadder and a wiser child. "I will arise and go to my father, and will say unto him, Father, I have sinned against heaven, and before thee. And am no more worthy to be called thy son: make me as one of thy hired servants."

The prodigal of the newspapers is not usually a chastened spirit; he has not usually had a fortune to dissipate; he resembles the original prodigal only in having left his home in hopes of exciting adventure.

In such a case as this, the shift in meaning is slight, yet significant. A single aspect of the significance acquires sufficient importance to create a meaning of its own. The word, as it were, shoots forth sub-meanings, as a branch shoots forth twigs. Branch and twig receive their nourishment alike from the same root.

This process might be called semantic fission—a split of meaning.

Sometimes the change in meaning may appear to be a reversal, if not a frank inversion, of the word; yet the opposing significances will be rooted none the less in the central meaning of the term. A striking example is the word *passion.*

The word *passion,* in English, covers the extremes of exaltation. At the one end it signifies the most ecstatic lust of the flesh; at the other, it stands for the most ecstatic fleshlessness, as in the Passion of the Lord. In between, it and its derivatives may refer to "any condition of being following from the action upon it of any cause." At the core of the root is the idea of suffering, of bearing. That is passive which suffers, bears, or receives an action. A *patient* is one who is bearing pain. The

Passion of Christ is his martyrdom. The *passion* of a lover is, or may be, a lesser martyrdom.

Obviously, a word with such a central meaning is capable of almost infinite variation. *Passion* thus can mean love or rage which are at times undistinguishable; it can mean any *ecstasy* of feeling—any feeling, that is, with the power of making us *stand outside* ourselves.

Greek *pathos,* whence, through the Latin *patior* and *passio,* we get our word *passion,* meant 'suffering,' 'passion,' or even 'disease.' When Cicero, noted for his truly creative translations of Greek into Latin, came to translate the plural of *pathos,* he did not use the Latin noun *passiones,* but the plural *morbi* (our word *morbid*) meaning 'diseases.' *Pathos,* of course, is the source of the element *path* or *patho* in all words such as *pathology,* the science of diseases; *pathological,* diseased or morbid; *pathetic,* affecting or moving the emotions; *neuropath,* a sufferer from nerves; *psychopath,* a mental sufferer, and so on.

Passio, as a translation of *pathos,* came in when the Stoics began to be expounded in Latin. For to the Stoics, *pathos* was a name for any emotional disturbance; to them, disturbance of this sort was disease, hence *pathos.* Freedom from such disturbance was *apatheia,* or 'absence of emotions.' This is our word *apathy.* The Latin derivative that corresponds to the Greek *apathetic* is *impassive.* Here we come upon more contradiction. *Passive* and *impassive* are, as has often been pointed out, at once synonyms and antonyms. To be *passive* is to be patient, suffering, acted upon without reacting, that is, without showing emotion. To be *impassive* is to be (apparently) unsuffering, in the sense of not showing any emotion—that is, really, to suffer without showing it.

This is not, clearly, a case such as that of *restive* and *restless,* which are not immediately connected. *Restive* is ultimately from Latin *restare,* 'to hold back,' 'resist.' Formerly it meant 'inactive' or 'sluggish'; to-day it means 'restless,' 'fidgety.' These seemingly opposite meanings are easily reconciled. A person or animal who resists coercion is one who wishes to remain at rest in the position from which one wishes to move him. Such

a person or animal, when coerced, becomes fidgety and restless in the attempt to resist coercion. *Restless* is derived from Anglo-Saxon *restléas* and is cognate with German *rastlos,* that is, 'deprived of rest.'

To return to *passive* and *impassive:* there is, as we have seen, in the seeming contradictoriness of the words a conciliation similar to that recognized in the history of the word *restive*. Yet few writers or careful speakers would use *passive* and *impassive* as synonyms. Of the two, *impassive* is the stronger word, as the impassive person would be, somehow, stronger than the passive one. Passivity implies lack of resistance, just as restlessness does; impassivity, like restiveness, implies resistance—the kind of resistance that conquers the appearance of suffering. There is, as most sensitive readers would feel at once, a difference between a passive countenance and an impassive one. In the passive countenance there would be little suggestion of suffering; whatever was suffered would have been suffered in the sense of being borne without response. The impassive countenance, on the other hand, would suggest the conquest of something suffered—a triumph. To be sure, this is a rhetorical rather than an etymological distinction. Yet it is of such delicate distinctions that a vital style is fashioned.

The influence of Christianity upon the meaning of words taken from the ancient languages was naturally deep and lasting. While words are not to be regarded as so many containers, forever being emptied of old meanings and filled with new ones, they do suggest chemical combinations of which the formula—that is, the quantitative relationship of the constituent elements—is ever subject to subtle change.

In the case of certain important religious conceptions, however, we encounter a new phenomenon, which is perhaps best characterized by the phrase "semantic interfusion." Thus, while few words from the Hebrew-Phœnician group of languages passed directly into English, a number of central concepts were taken over from one civilization to another and

poured, so to speak, like new, imported wine into the old bottles.

"Judging from the important part played for centuries by the Phœnicians in world-trade and navigation," writes the distinguished French philologist A. Meillet, in his essay, "Influence of the Hebrew Bible on European Languages," [3] "it might have been thought that many a name they gave to their merchandise would have slipped into Greek and Latin, and passed thence into the modern languages of Europe. But a search for such words will bring scarcely one to light. Many terms current in civilized Europe were borrowed by Greek and Latin from Mediterranean tongues, but these languages were not Hebræo-Phœnician—not even Semitic; *wine* and *oil,* for instance, come from some lost language once spoken on Mediterranean shores. Only here and there some solitary word such as the coarse textile stuff called *sack,* and that article of dress called a *tunic* (from *tunica,* Latin form of the word), can be traced back to the Hebræo-Phœnician group of languages."

The Hebrew influence, that of the Bible, enters into the languages of Europe *not as vocabulary but as meaning;* not in the form of specific words but in the essence of specific meanings. Meillet traces in detail this semantic interfusion as it affects a number of salient terms.

At the time of the first translation of the Bible—the Alexandrine version, called also the Septuagint, made between the third and second centuries, B. C.—the Jews of Egypt had become Hellenized, and wished to read their Holy Book in the tongue of their adoption. This was a colloquial Greek dialect, as Meillet points out; but the Biblical thought was not easily to be translated; it was too different from the mental habits of the Greeks and their tongue. As a result, the Greek words "had to be molded anew to clothe ideas so foreign to them. Even the later translators into old Latin—with the original Hebrew

[3] In *The Legacy of Israel,* planned by the late I. Abrahams and edited by Edwyn R. Bevans and Charles Singer (Oxford University Press, 1927). See pp. 473–481.

before them—based their version on the model set by the Septuagint. Among the Latin words which were used to express the Hebrew were two kinds: (1) Latin words undergoing the same modification as had their Greek equivalents; (2) Greek words, the meaning of which had already changed. As time went on, all the languages of Europe followed along the same path, shaping themselves after the two models—the Greek and the Latin."

The Greek word *kyrios* was not, in origin, a religious term. It meant 'chief,' 'master,' 'owner.'

The Greek word *angellos* is known to every schoolboy as 'herald' or 'messenger,' from its early appearance in all books of instruction.

The Greek word *diabolus,* originally, meant only 'a calumniator.'

It is directly through the influence of the Bible, through the need of refashioning old words to contain new conceptions, that *kyrios* took on the meaning of 'Lord'; that *angellos* took on the meaning of 'angel'; that *diabolus* grew into 'devil.' "At first sight," writes Meillet, "we seem to have before us a word entirely Greek, but in reality the result of fusion of Greek and Hebrew elements. Seemingly wholly Greek, it owes to Hebrew the essence of its meaning."

The transfusion, or interfusion, of meaning was passed on to Latin and the more modern European tongues. Latin *dominus,* used to translate *kyrios,* was no more 'Lord' in the religious sense than was *kyrios* originally. Nor was the French *seigneur;* nor, for that matter, the English *lord.* Greek *eulogo* meant, at first, precisely what is meant by its Latin equivalent, *benedicere,* 'to speak well of,' 'to commend.' Under the influence of the Bible, however, these words came to mean, as Meillet translates it, "to pronounce a formula conveying spiritual beneficence"; this semantic change affected such words as the French *bénir,* the German *segnen,* the English *bless.*

The word *paradise,* again as all students of elementary Greek are aware, meant originally 'a park'; it is derived from the Persian, and in Greek is *paradeisos.* Not until the trans-

lators required a term for the Hebrew *gan* (the *garden* of Eden) was the word *paradeisos* elevated in significance so as to stand for that historical spot. "From that time onwards the word which had held but a bare foothold in the Greek language played in it an important part, going from Greek into Latin (*paradisus,* with the Biblical meaning), and thence into all modern Europe. It is curious to see an Iranian word pass into Greek and flourishing in it because it was used to translate a Hebrew term. It is one of the most remarkable instances in the history of a vocabulary formed by the interfusion of words of diverse origin."

§ 4. LADIES AND GENTLEMEN

When words change, frequently they induce changes in associated words. For it cannot be too constantly kept in mind that the word is not an isolated phenomenon; it is part of a cluster—not a point but a focus.

Thus, all words for "young girl" are subject to rapid deterioration; they themselves are exposed to the same unwelcome attentions visited upon the being they designate. ("Unwelcome attentions" forms a euphemism so common that, like other euphemisms, it has almost ceased to be considered as such.) In French, one word after another that has meant simply a young girl has dropped out of polite usage because words signifying this sweet creature too easily take on the meaning of what some of the weaker of the sweet creatures may become. Thus *bachèle, mescine, touse, garce,* and even *fille* have in succession been demoted.

In English, for similar reasons, we have similar trouble with words such as *mistress, lover* and even *woman.* To refer to a lady as one's woman is to imply an insult. It is difficult, indeed, for a foreigner to employ, in any modern language, a word for the female sex and not run the risk of falling into unintentional insult or humor.

Take, as a pertinent example, our own exalted word *queen.* It is cognate with Anglo-Saxon *cwene,* to Old High German

quena, to Icelandic *kona,* to Gothic *gino,* to Russian *zhena,* and to Greek *gunḗ.* It thus occurs in all English words containing the element *gyne,* as in *gynecology,* the science dealing with the diseases of woman; *gyneconitis,* a *gynæceum,* or place reserved for women in a church; [4] *gynealotry,* the worship of women; *gynocracy,* "petticoat rule," or government by women; *misogyny,* woman-hating. The word *queen* originally was simply the word for woman. But since woman, especially in the eyes of man, may rise to the heights or fall to the depths, so may the word that describes her. And in the English word *quean,* differing in but a single vowel from the word *queen,* we have the antithesis of royalty. *Quean,* beginning with the same meaning as *queen,* proceeded in the opposite direction. It came to mean a low woman, a wench, a slut.

The word *wench* itself, like so many other words for immoral women, began its life as an inoffensive term for a child of either sex. It is from Middle English *wenche,* meaning 'child.' It became specialized in the female aspect, took on the significance of maiden or damsel, then of servant, then of strumpet, and, in the United States, of a colored woman. In addition, then, to male prejudice, it became tinctured with racial prejudice. The way of words is, alas, the way of life. One of the "perhapses" that we discover associated with the word *wench* is its kinship to Anglo-Saxon *wancol,* 'unstable,' and the English *wink. La donna è mobile,* not only in opera, but in linguistics!

The word *girl,* like the word *wench,* originally meant a child of either sex. Of course it has undergone almost every semantic change that a word with a female connotation can experience.

What happens to words designating people happens as naturally to words standing for their habitations.

Consider the word *house,* which may rise to the heights of the connotation enjoyed by *queen,* and sink as low as its homonymous, but hardly synonymous, *quean.* It may rise even

[4] The Yiddish expression for the woman's section of a synagogue is "*veibershe ganik,*" usually interpreted as "woman's section, or balcony." The expression is really tautological, for "ganik" comes from *gynæceum,* which originally meant "woman's apartments."

higher, as in the sentence, "In my Father's house are many mansions." The name of the Egyptian Pharaohs, incidentally, signifies *house.*

Nyrop, in one of the best monographs devoted to the semantic fate of words, has offered an interesting treatment of the word that gives us, finally, *brothel.* The French word *bordel* signified, originally, a small house. He quotes from an old French poem written around 1200:

> *Car qui veit le bordel son voisin alumé*
> *Il a poür del suen.*
>
> *Who sees his neighbor's house afire*
> *Has fear for his own.*

In a translation of a sermon by Saint Bernard, going back to this same period, it is stated that Christ was born in a lowly *bordel,* which is as far from a *bordello,* or 'brothel,' as any meaning could be. In semantics, extremes often meet.

The case is not quite so simple as an unannotated reading of Nyrop would lead one to believe. There appears to be a confusion here between two words: *brothel,* from Middle English for 'prostitute' or 'worthless fellow,' and *bordel,* French for 'a hut.' *Bordel* is of German origin, and akin to our word *board.* The easy stages by which any word for *house* is transformed would make such a confusion the more easy. *Casino* is in origin nothing but a little house, a *bordel.* (*Casa,* in Latin, is 'a cottage.' *Casino* is Italian.) At first *casino* meant 'a country-house,' or 'a pleasure-house.' It naturally shifted to such meanings as a room or building set aside for the pursuit of pleasure, such as gambling or dancing. The Casino at Monte Carlo is *the* gambling house, par excellence, of the world. The card-game, *casino,* is named after the place (i. e., the pleasure- or gaming-house) where it was played. *Casino,* of course gives off overtones of *brothel* in the derogatory sense, as does such a euphemism as *sporting house.* The slang *barrel house* (or, as the Negro dialect has it, *bar'l house,*) is a drinking dive, and derives its name from the containers of the drink. It, too, easily became a semi-euphemism for *brothel.* Finally, the word *house,* used all

by itself in certain connections, comes to mean a *house of ill fame*—an expression, by the way, which begins to sound humorous, since it is a relic of the days when *legs* were *limbs*.

Consider, in our own tongue, the many meanings, secular and sacred, of the word *dame*.

It comes to us, directly, from the French; it is, in origin, the feminine of the Latin *dominus*, which means 'master,' 'lord,' 'ruler.' Classical Latin *domina* became, in the mouths of the people, *domna*, whence French *dame*, Italian *donna*, Spanish *doña*. The core-idea of rulership persists in such words as *domination*. *Dame* is akin, moreover, to such terms as *danger, dungeon, dominie, duenna, dam* (in the sense of *mother*) and even *Dan*, as in *Dan Cupid*.

Cupid's first name is not, as generally supposed, Daniel, or Dan for short. Dan is, like Don—in Don Juan—a descendant of Latin *dominus*, and is equivalent to Master or Sir. That this title, first given to members of religious orders, should be represented to-day only in the phrase Dan Cupid, may contain a moral of its own.

Danger is derived, indirectly, from Latin *dominium*, 'power' or 'property,' through a conjectured people's Latin, *dominiarium*. Its first meaning, then, was not that of 'peril'; it signified rather 'authority,' 'power,' 'control.' It is easy to see how one subjected to, or held in, the control of another would be in danger. Our meaning, however, is a derived one, not an original.

A *dungeon* is a keep—a place where we hold against his will one who has come under our authority, our *dominium* or *dominion*.

We see, then, the wide variety of meanings that can branch off from a central conception. To return to *dame*, it is easy to see, too, how the idea of a woman in power, a woman in authority, a mistress, could branch off into the simpler notion of a woman. This, precisely, has happened to the word *mistress* itself, which once was the feminine of *master*, in fact as well as in etymology.

Dame, then, has stood in English for every aspect of woman-

hood. *Notre Dame* is translated as 'Our Lady.' Conversely, Dame in English titles, may stand for 'Lady.' A *dam* is a female parent, among the beasts. Strangely, too, the power of the term *dame,* in the sense of mistress of a school, or matron, was so intense that it acquired a masculine significance. "To this day, however," quotes *Webster's New International Dictionary* from J. Corbin, "—such is the force of tradition—all masters who are not tutors are called *dames.*" Perhaps the final transformation of this noble word is the sound it assumes in current slang. "Who's that dame" (i. e., *skirt, jane, sweetie, broad,* or otherwise undistinguished woman) "I saw you with last night?" Here, at long last, has the dame been tamed!

§ 5. MEANING-SHIFT

Sometimes, when a word changes in meaning it induces change in a number of associated words. An example of such compound change that has become classic is provided by a series of terms from Roman law.

When *damnum* ceased to mean 'legal obligation,' or 'trust,' and came to mean 'damage,' *noxia,* which had meant 'damage,' took on the meaning of 'guilt.' But *culpa* had meant 'guilt.' Now it took on the significance of 'negligence.' *Casus,* which had meant 'negligence' until the intrusion of *culpa* crowded it out, now took on the meaning of 'chance,' whereupon *fortuna,* which up to that time had meant 'chance,' disappeared altogether from the vocabulary of Roman law. The compound shift of meanings is tabulated as follows:

	LEGAL TERMS FOR				
	LEGAL OBLIGATION, TRUST	DAMAGE	GUILT	NEGLIGENCE	CHANCE
OLDER PERIOD:	*damnum*	*noxia*	*culpa*	*casus*	*fortuna*
LATER PERIOD:	*damnum*	*noxia*	*culpa*	*casus*	passed out of legal terminology

I have noticed, in my own experience, a growing dislike for such words as *service* and *personality*. Modern advertising and the automobile business, it seems, have denatured the first of these; the second has been ruined for me by the show business. I find myself casting about for synonyms, nor am I the only one to feel that many once noble words are being spoiled by new applications. At one extreme, words are often injured for some by the mere fact that they are excessively employed by persons, or by groups, that one does not like. Philosophers opposed to Croce, for example, develop an aversion for the word *intuition;* some psychiatrists dislike the word *complex* in its psychoanalytic sense. Such word-aversions may act like a taboo, and compel the speaker to seek substitutions for the objectionable word. *Artist* loses caste when it is seized upon by barbers, for example, who are a highly useful (not to say occasionally imaginative) species, if not quite in the class of Heifetz and Picasso. *Creative* somehow suffers when applied to interior decorating. When quondam hair-dressers take to calling themselves *beauticians,* something happens, if ever so subtly, to such words as *physician*. It is not impossible that some of the words here mentioned will induce alterations in the meanings of other words, and cause meaning-shifts comparable to those we have just examined in Roman law.

CHAPTER XIV

WORD-HISTORY, OR ETYMOLOGY

. . . In matters of language the errors of the people gradually become truths. BRÉAL, in *Essai de sémantique.*

The general ignorance of even the most elementary notions on the subject, as perpetually exhibited in our periodical literature, is truly deplorable, owing probably to the fact that anything like a scientific treatment of etymology is of comparatively modern growth. It is not a little remarkable that the history of the English language, and particularly of the change in its pronunciation, is seldom found to be amongst the subjects which "every schoolboy knows." A person wholly ignorant of botany would hesitate, in these days, to dash headlong into a botanical subject; but similar caution, as respects the study of etymology, is frequently scouted as displaying a needless timidity. Every man, as was once observed to me, thinks he can drive, and that he can derive. W. W. SKEAT, in the preface to *A Primer of English Etymology.*[1]

§ 1. PRECAUTIONS

WE NOW SEE THAT IN ORDER TO HAVE THE COMPLETE history of a word it is necessary to know at least (1) the evolution of its sounds, (2) the evolution of its meanings, and (3) the nature of its association with other words—that is, the contexts in which it has occurred. Etymology, then, is a combination of phonetics and semantics.

It is a historical, not a lexicographical, study. Lexicography (Greek *lexikón,* 'a dictionary,' 'a word-list,' 'a vocabulary') deals with definitions; a lexicographer is one who compiles dictionaries. Etymology deals with the phases through which the meaning of a word has passed; the older meanings, however, once they pass out of currency, no longer live, and they

[1] W. W. Skeat, *A Primer of English Etymology* (Oxford University Press, 1895).

are not to be brought up as evidence of what the word should mean to-day. Words mean not *what they meant,* but what they *mean.*

Thus, if we are in a moralistic mood, we may find comfort in the fact that the Spanish for 'to speak'—*hablar*—comes from the Latin *fabulare,* to which our word *fable* is related; *hablar,* however, means, not 'to tell fables,' but 'to speak.' Consider, for example, the embarrassment of a butcher with a taste for etymology on offering his customers a bargain in *face* of *rump.* That beautiful flower, the orchid, was so named by the Greeks because of its resemblance in general shape to the human testicle. The florist who cuts orchids could not, by any stretch of the imagination, relate his activity to such a medical term as *orchitis,* or to the surgical operation known as *orchotomy.*

The Latin for 'testicle,' *testis,* is regarded as being at the root of *testament, testify, testator,* and that group. When, in the Bible, an oath is taken by placing the hand upon the thigh, the thigh is a euphemism. The testicle, having been looked upon as the sign of manhood and one of the sources of life, became a word for *witness;* hence, in addition to *testament, attest, detest, protest, contest.*

We speak with the meanings that words have at the moment of our speech, and not with reference to their former significance. It is, of course, interesting, and in many ways advantageous, to know the history of words and forms; it is not, for normal communication, necessary.

As right as rain has come to mean *quite correct; right* originally meant *straight in direction.* We misread *till death us depart* (i. e., divide) and the marriage service commits the harmless error of saying "till death us do part." We hardly dream of associating so pedestrian a term as *fancy goods* with the noun in "Tell me where is fancy bred?" Yet they are the same word, *fantasy. Fancy goods,* as we may see from the Spanish form—*géneros de fantasía*—are goods such as one's fancy would depict as the most desirable. A baseball *fan* is one who fancies the game; or, one who is a fanatic about it. If the first etymology is correct, then the term is yet another relative of

fantasy; if the second is the true origin, then *fan* goes back to Latin *fanum,* a *fane* or 'temple,' in which the *fanatic* is the ardent worshiper. As for the baseball verb *fan,* to strike out, that is a picturesque slang term from another verb altogether: *to fan, to winnow,* related to Latin *vannus* and Anglo-Saxon *fann,* 'a fan' or 'winnow.'

A *brat* was once any child; it is akin to the word *brood,* as in a *brood of chicks. Onion* and *union* are supposed to be the same word; Latin *unio* referred to a single, large pearl, but we are not likely to mistake the shape (or the odor) of the one for that of the other. *Buxom* is akin to German *biegsam, beugsam,* meaning 'pliable,' 'obedient'; is it an aspersion upon the morals of the heavier ladies that it should have come to mean 'plump and rosy'? *Puny* is from the French *puis-né*—that is, 'one born afterward,' 'a junior'; but the first-born, too, may be puny. *Sad* meant, at first, *set, sedate, seated;* we may nevertheless be sad when we stand or run. And one may be sedate, too, on both feet. (Latin *sedare,* past participle *sedatus,* 'to allay,' from *sedere,* 'to sit.' *Sedare* is what is called a causative verb—that is, it means 'to make' or 'cause to sit.' A *sedative,* nevertheless, may calm us even if we take it standing.)

The word *fee* comes from a word meaning cattle. So does the word *pecuniary.* Akin to *fee* are Old French *fieu* and Old High German *fehu.* Akin to *pecuniary* is Latin *pecus.* Going farther back into origins, we find that *fehu* and *pecus* are akin to each other. Man's chief property, his money, at one time was his cattle. *Cattle* and *chattels* are different forms of the same word; it suggests Latin *capitalia,* from *caput. Caput* is 'head'; we still speak of so many *head* of cattle. *Caput,* then, referred to principal sum, to stock, to the animals who constituted one's *chief* property. (*Chief* itself is Latin *caput,* as derived through French *chef.*) When, to-day, we accept a fee or a pecuniary reward, we do not think of cattle, but we think nevertheless of capital!

It is self-evident that etymology is of primary importance in the reading of old texts. Without it, the reader or student may sometimes go sadly astray. Shakespeare and the Bible are

strewn with traps for the unwary. Let me offer a couple of examples that may stand for many. The first example should suggest that reading Shakespeare without a glossary is a hazardous activity.

A few moments after the curtain has risen upon *Hamlet,* Francisco and Bernardo are changing places on the platform before the castle.

Francisco: *For this relief much thanks. 'Tis bitter cold,*
And I am sick at heart.
Bernardo: *Have you had quiet guard?*
Francisco: *Not a mouse stirring.*
Bernardo: *Well, good night.*
If you do meet Horatio and Marcellus,
The rivals of my watch, bid them make haste.

A careless reading of the text, or ignorance of the etymology of *rival,* might lead one to consider that Horatio and Marcellus were foes of Bernardo, and to wonder why he should bid them make haste. *Rival,* however, in Bernardo's mouth means *companion, partner, sharer.*

The transition from companionship to rivalry is not too subtle. A rival, even in the sense that Ben Jonson chose as title for one of his best-known plays, is a partner in aim. He desires the same prize that his competitors desire. Two wrestlers, facing each other on the mat, are foes; yet they are linked, by the very nature of their contention, close to each other, and their rivalry often takes on the burlesque appearance of loving embrace. Rivals are *partners* in *difference. Rivalis* referred in its earliest usage to those who dwelt on the banks of a stream (*rivus*). Since streams have two banks, there were usually dwellers also upon the opposite bank. Those who lived on the same side of the bank were likely to be friends; those who lived across the river, particularly when water-rights were in question, were likely to become involved in contention. Hence the word *rival* could mean either friend or foe.

When Scott, in a famous passage ("Breathes there the man with soul so dead . . ."), speaks of

The wretch, concentred all in self,
Living, shall forfeit fair renown
And doubly dying, shall go down
To the vile dust, from whence he sprung,
Unwept, unhonor'd, and unsung . . .

he uses *wretch* in its old sense of *exile* (Anglo-Saxon *wrecan,* 'to drive out' or 'to punish'). Those who are punished with exile are supposedly evil; hence the evolution of the modern meaning, through the associated ideas of evil and misfortune.

Virtue has at its base the Latin *vir,* 'a man'; *virtus* is the quality of 'manly courage,' 'strength.' To speak to-day of a man's virtue is to imply something feminine about him, for *virtue,* the supreme quality of manhood, has become, through the sense of excellence in any phase, the supreme quality of womanhood. Hence, too, *virtuoso* and *virtuosa* for outstanding performers upon musical instruments.

But alas for manly courage! Our word *prude* is considered to come from a shortened form of the Old French *prudefeme,* which is to say a discreet or excellent woman. Old French *prou* or *preu* meant 'brave' or 'excellent.' It is discoverable in our word *prowess,* which is related to the Latin *prodesse,* 'to be useful.' (*Pro,* 'for,' and *esse,* 'to be.') The *prow*-ness (modern French *preux*) of the male has become the withdrawal of the female; the *preux* (gallant, brave) has become the *prude!*

All Bibles, in whatever version and in whatever tongue, should be read with etymological care.

In the translation by Luther we read:

Gott thue nichts als schlechtes, und das Evangelium sei eine kindische Lehre.

Translated as if it were modern German, the line would seem to say, "God does nothing but evil, and the Gospel is a childish doctrine." Manifestly this could not have been what Luther meant. To Luther, *schlecht* (which is the modern German word for 'bad') meant 'smooth,' 'honest,' 'upright' (modern German *schlicht*); *kindisch* meant what modern German

calls *kindliches,* or 'child-like.' What the startling passage really means, then, is that "God does nothing but what is just, and the Gospel is a childlike (i. e., simple, guileless,) doctrine."

As words alter meaning in the evolution of the same language, so they alter meaning (now clearly, now subtly) in passing from one language to another. Latin *vitiosus,* from *vitium,* 'a vice,' evolves into the French *vicieux,* where it means 'vicious'; in Italian, however, it gives not only *vizioso* but *vezzoso,* with the regular meaning for the first form, and the significance 'charming' for the second. Vice may charm, so that it may tempt and corrupt.

It is therefore advisable, in translating from one tongue to another, to beware of interpreting similarity of appearance and of origin as similarity of meaning. French *joli* does not mean 'jolly'; *fille* does not mean 'filly'; *fleurette* does not mean 'flirt'; *smoking* (continental term from English *smoking-jacket*) does not mean 'smoking'; German *Knabe* does not mean 'knave'; French *villein* does not mean 'villain.' And so on indefinitely.

§ 2. POPULAR ETYMOLOGY

When Voltaire penned his famous dictum that etymology was a study in which the consonants counted for almost nothing and the vowels not at all, he was justified. For in his day the study of words had not progressed very far from the status that the pursuit had attained in the classical epoch and even in medieval times. The most fantastic conjectures were set down, and received, with amazing credulity. Nor were these conjectures the idle work of ignoramuses. They represented, rather, the findings of the chief minds. Etymology was a subject not so much for scientific investigation as for verbal ingenuity. It was a kind of punning trickery, as when, at school, we used to derive Alexander the Great from "all eggs under the grate." Except that it was taken soberly.

Children are fond of punning, and many of their plays upon words suggest a consciously false etymology. "I didn't have *pneu*monia," says one bright tot. "I was sick long ago; that

was *old* monia." I recall, from my grammar-school days, a mischievous companion who nicknamed the *rattan* stick (with which, for infractions, we used to be rapped across the palm of our hand) the *rap-hand* stick. But children are not the only childish etymologists.

Barbarus, in Latin, stood for 'barbarian.' We have seen that the word is sound-imitative (onomatopoetic) in origin. Medieval etymologists, however, had a far more picturesque derivation. *Barba* was Latin for 'beard'; *rus* was 'country.' (It appears in our word *rustic.*) A *barbarian,* then, according to the medieval etymologists, was a coarse-bearded countryman! This is slightly better than the popular term *sparrow-grass* (a classical example) for *asparagus;* for, at least, in *barbarus* there are the actual sounds of *barba* and *rus,* whereas in *asparagus* there is neither *sparrow* nor *grass.* In the first instance, the pseudo-etymologist has split up a word into phonetic components that resemble Latin words, and then invented a theory to account for the juxtaposition of the imaginary words. In the second, the popular mind has split up an unfamiliar sound-combination into parts that suggest familiar words or notions.

Thus, to the immigrant, a *certificate* becomes a *stiff-ticket.* To the facile ear-and-eye etymologist *news* is simply an abbreviatory symbol for North, East, West, South—the four corners whence the news of the day is gathered. It is inconvenient for this theory that *news* is a plural form of *new,* which has acquired a singular meaning, and that the French *nouvelles* is used in the same way.

The *Jerusalem* artichoke has nothing to do with the Holy City. It is a popular etymology from the Italian *girasole* (sunflower); Latin *rosmarinus* gives *Rose Mary; Bellerophon* gives *Bully Ruffian.*

In much the same way that *asparagus* becomes *sparrow-grass,* such a foreign term as *route du roi* (the king's highway) becomes, in the mouths of English soldiers who hear French rather than speak it, *Rotten Row.* After all, a highway is, in a manner of speaking, a row. *Château vert,* by the same process, becomes *Shotover;* the name of *Bunker Hill,* in Charlestown,

Massachusetts—a patriotic shrine—is as simply derived from Boncœur, though there is not the slightest relationship between a bunker and a good heart.

The popular mind resists meaninglessness; or perhaps it would be subtler to say that it insists upon meaning. A groom with two horses, according to Isaac Taylor, called one of them *Odd Fellow* and the other *Thursday Morning.* These names had a meaning to him. To be sure, their true names were *Othello* and *Desdemona;* but the groom's mind at once converted these unfamiliar sounds into sounds that made familiar sense.[2] The unknown is explained by the known; it is made, in the case of sounds, to sound like the known. In the matter of foreign names and their transformation on the popular tongue, the habit has received a name that is itself evidence of the habit. It is called *Hobson-Jobson.* This is one of the numerous transcriptions for the verbal manner in which the British soldiers in India interpreted the ritual wailing of the Mahommedans, who at the procession of the Moharram beat their breasts and cried, "Ya Hasan!" [3]

In no other way do we receive, into the standard language, such strange terms as *meerschaum* for a kind of pipe, or *love-apple* for the humble but healthful tomato.

Meerschaum originates in France as Kummer's pipe: that is, *pipe de Kummer.* The popular ear, however, makes a false division of the sounds, and transforms them into *pipe d'écume de mer;* which is to say, 'a pipe of sea-foam.' Now the name of Kummer, and his pipe, came originally from Germany. The Germans forget this; they translate *écume de mer* as *Meerschaum,* and such the term remains henceforth in both German and French!

As for *love-apple,* it is the product of a similar false division, this time in Italy. The original phrase was *pomo de' Mori:* the 'Moorish apple.' The popular ear, however, is more attuned to love than to Moors; it hears, not *pomo de' Mori,* but *pomo d'amore,* 'apple of love.' Hence, in French now, *pomme*

[2] See Isaac Taylor, *Words and Places* (E. P. Dutton, 1909), pp. 264–270.
[3] *Hobson-Jobson,* by Yule and Burnell.

d'amour, and in German *Liebesapfel.* It is the story of *asparagus* and *sparrow-grass* all over again. In one instance the language rejects the false origin; in the other, it accepts. There are countless words in all languages that can boast no more logical history. Once the word has been accepted by usage, however, its past cannot be held against it.

Popular etymology, or, as it is often called, false etymology, is the poetry of word-history. It reveals the untutored imagination of the people at work in the world of sounds and meanings. It is never altogether capricious, any more than is any other process of language. There is a certain twisted logic to it, just as, in primitive magic, there is a certain clumsy science. There is association of ideas, even if the association is based upon error.

In the process of false etymology there must reside valuable suggestions as to how words grew up in the distant eras before writing was invented. For, if with widespread systems of recording we nevertheless build up such erroneous theories as to the composition of words, what must conditions have been when the imagination ran riot in the primitive brain, and words could be constructed on the basis of the wildest associations?

If associations suggest words, words in turn suggest associations. In certain parts of the European continent, the virtues of saints are frequently based upon nothing more concrete than the false etymologies of their names. Thus, for example, Saint Ouen is reputed to have power over hearing, because Ouen suggests *ouir,* French for 'hear'; Saint Mamert, because the name sounds slightly like *mamelle,* can cure the ills of woman's chest; Saint Claire enables people to see more clearly (*claire*); Saint Léger (*léger* means 'light in weight') is excellent for obesity.

So, too, in Germany and other of the Teutonic countries, Saint Valentine is a protection against epilepsy, because Valentine sounds somewhat like *vallende siekte* (Dutch for 'falling-sickness'); Lambert guards one against *Lahmheit* (German for 'lameness'); Augustine preserves the sight (*Auge,* 'eye'). This,

like so much popular etymology, is a sort of sober punning, of word-play that turns serious.

There is a French tower near Grenoble, tells Pareto in his work on Sociology, that is called *La Tour Sans Venin* (The Tower without Poison). The original name was *San Verena,* (Saint Verena) of which *Sans Venin* (without poison) is a perversion. As a result of this change, a superstition has grown up. "No poisonous animal," it is explained, "can exist in its neighborhood."

There is a French phrase, *parler français comme une vache espagnole.* I first heard it in high school, and wondered long why a Spanish cow should try to talk French at all. Not for years did I learn that the saying was based upon false etymology, and that in its original form it made excellent sense: *parler français comme un Basque, l'espagnol,* that is, to speak French the way a Basque speaks Spanish.

§ 3. SCIENTIFIC ETYMOLOGY

What delayed for so long the emergence of a true science of etymology was the slow development of phonetics and of semantics. It is difficult for the layman to understand how, if the Persian word for *sad* is precisely that—*sad*—there yet may be not the slightest connection between them; how, if the Spanish word for *much* is *mucho,* there yet may be no connection between our word and the Spanish. One of the first things the etymologist learns, indeed, is to be suspicious of the historical association between words in different languages that look alike.

English *much* is a shortened form of *mickle*—a word that is frequently misused in the pseudo-proverb, "Many a mickle makes a muckle." This, supposedly, means, "Many a little makes a much." But *mickle* is only a dialectal variation of *muckle,* and the proverb, thus stated, really says that many a much makes a much, which is indeed much of a muchness.

The original saying made sense. It read, "Many a little (or

pickle) makes a mickle." *Mickle* is akin to the Greek stem *megalo* (great), familiar to us in such terms as *megalomania* (delusion of grandeur). Spanish *mucho,* on the other hand, descends from Latin *multum.*

One must not, in language, judge from appearances. Words that look very much alike may not be in any way related; apparent strangers may turn out to be sisters or first cousins.

Words, though they look and sound alike, are not necessarily related.

Words, though they sound and look dissimilar, are not necessarily unrelated.

There is no relationship between Latin *arbiter* and German *Arbeiter;* none between Latin *cura* and English *care,* even though they mean similar things; none between Greek *hólos* and English *whole,* between German *Abenteuer* and French *aventure,* between Greek *cháris* and English *charity.* There are coincidences in language as in all other experiences.

The Rev. Walter Skeat, one of the foremost etymologists in our tongue, author of a pioneer *Etymological Dictionary* and of works upon the science of etymology, has pointed out in his explanation of the word *tram* how easily errors are made.

The word *tram-roads* was for long regarded as an abbreviation of Outram-roads, named supposedly after Mr. Benjamin Outram, who had made improvements in the railway system for common vehicles. Mr. Outram was active in the early years of the nineteenth century. Now, Outram is accented on the first syllable; it is not normal for an unaccented syllable to be taken as the shortened form of a word. For *William* we say *Bill,* or *Will,* not *Yam.* So that, were the vehicle named after Outram, either his whole name would have been used, or some such term as *Out.* What spoils the case definitely for this etymology, however, is the documentary fact that the word *tram* appears as early as 1708, in the sense of *sledge,* almost a hundred years before Mr. Outram was active.

That *sirloin* had received its name from either Charles II or James I, having been knighted in gustatory delight by one

of these monarchs, long made a pretty story. Unfortunately, as Skeat pointed out, the word was in use long before James I was born. *Sirloin* is nothing but French *sur* (upon) and *longe* (loin), and, especially in the United States, indicates the part of the loin next behind the porterhouse. *Porterhouse* itself means a house where porter is sold; the cut of steak so named received its designation supposedly because a certain proprietor of a porterhouse made it popular. *Tenderloin* beef, on the other hand, gave its name to the night-life district of New York because a certain police captain, having been transferred to the old Twenty-ninth precinct of that city, declared that henceforth, after having eaten chuck steak for so long, he would eat tenderloin—that is, he would enjoy succulent graft, or, as another figure has it, "easy pickin's."

How can there be any phonetic connection between *slave* and *glory?* How can there be any connection between a caterpillar and a butterfly? The only answer is that etymologies are as truly authenticated, under the conditions of etymological science, as are the strange metamorphoses of life in the sciences that go to make up the study of biological evolution.

The root to which *glory* and *slave* have alike been traced is *kru,* or *klu,* to hear.[4] We are glorious when everybody hears about us. Greek *kléos* is 'glory'; *klutós* is 'renowned.' Latin *inclitus,* 'glorious,' was originally *inclutus.* Sanskrit *çravas* means 'glory,' as does the Russian *slava. Slavonic* and *slava* are related; the race named itself for glory. Other races who conquered the Slavs made the term synonymous with *slave* and *slavery.* This fate of words is familiar to us from our delvings into semantics. A complete etymology, however, must explain *all* changes: those of sound as well as those of meaning.

Sanskrit *cru,* 'to hear,' is cognate with Greek *kluein,* and Latin *cluere.* A *client* is originally a dependent—one who listens. Anglo-Saxon *hlud,* 'loud,' and *hlyst,* 'hearing' (listening) are related words; the English words *client, glory, loud, lurk* (to lie in wait), *listen* and *lumber* (to make a noise) are

[4] I use, for these etymologies, Skeat's *An Etymological Dictionary of the English Language.* Second Edition.

likewise related to these various developments of the root *klu* or *kru*.

Ask your neighbor (or yourself) where the *pantry* gets its name, and in all likelihood the reply will be that *pantry* is the place where the pots and pans are kept. The *buttery,* in similar fashion, will be explained as the store-room for butter, especially since *cutlery* stands for the instruments associated with cutting. The *pantry,* however, is a room or closet where bread and provisions are kept, and is derived from Latin *panetus,* 'a small loaf of bread,' through the French *paneterie*. The *buttery* has nothing to do with butter, which will be found in the pantry; it is a place for keeping casks or *butts;* in people's Latin a *botaria* was 'a wine-vessel.'

What would be more obvious than a connection between *sorrow* and *sorry?* When we are sorry, we feel sorrow. Yet there is no discoverable kinship between the words. *Sorry* is related to Anglo-Saxon *sar;* it is related to our own word *sore,* in the sense of grief or pain. *Sorrow* is akin rather to German *Sorge,* and the central meaning is that of 'care,' 'unhappiness.' That an etymological association should be established between two such words is altogether natural. The spelling of *sorry* (with two *r's*) owes its form to this confusion; it should be, and long was *sory,* (*sore-y*) and for the same reason that *stony* and *bony* are spelled as they are: a noun with the ending *y*.

The Japanese drink *sake* is easily etymologized into a word-relative of the good old English *sack*. There is no more kinship between them, however, than between Persian *sad* and English *sad*. English *sack,* in the vinous sense, is simply a development of French *sec,* meaning 'dry'; the old spelling of *sack* was, indeed, *seck*. *Sake,* moreover, is a different drink from *sack;* it is made from the fermentation of rice.

What has *sweetheart* to do with *heart?* Nothing. The original word was *sweetard,* and the *-ard* element was a simple ending such as is found in formations of the *dotard, coward, sluggard* type. Here is a case in which the false etymologizing of the popular mind comes, as so often, upon an abiding poetic truth. Language does not exist for etymology.

What scientific etymology demands has been implied in what has been written of popular etymology. Each sound-change in a word must be accounted for; each change in meaning must be accounted for; each element in the spelling, too, must be accounted for, since there is such a thing as etymological spelling.

Our word *fault,* for example, should be spelled *faut* or *faute;* such it was in Middle English. The *l* appears as early as the sixteenth century, yet it is known that the word continued to be pronounced as if that intrusive letter were not there. Pope rhymes *fault* with ought [5] and *thought.* The *l* was inserted because scholars thought that by so doing they were revealing the origin of the word in the Latin *fallere,* 'to deceive,' and the assumed form, *fallita.* The word *fail,* however, from *fallere,* had an *l,* as did the word *fall,* which is akin to it, and to *falsum,* our word *false.*

There are many such etymological spellings, in which the obtruded letters confuse the phonetic history of the word. Some of the spellings are based upon errors. We no longer write *abhominable* for *abominable,* as we know that the word is derived, not from *ab* and *hominem* but from *ab* and *omen.* We still write *posthumous,* however, in the mistaken belief that it is derived from *post* (Latin for 'after,' and *humus,* 'earth'; i. e., the work of a man left after he has been interred); the proper derivation is from Latin *postumus,* 'last,' the superlative of the adjective *post,* of which the comparative is *posterior.*

A so-called etymological spelling, to a scholar, is a nuisance. It obscures the proper pronunciation, and often influences it. Spelling, for that matter, is on the whole much more conservative than pronunciation. While sounds change in the mind and mouths of the speakers, spellings remain the same in print and in writing. *Often* would not be heard so often with the *t* sounded if it were spelled and printed as it is most often pronounced—*offen;* the *t* has become assimilated to the *f.*

Frequently two different spellings of the same word indicate

[5] See note under the word, in *Webster's New International Dictionary.*

that the different versions entered the language at different times, or from different sources.

Languages frankly borrow words from one another. Also, although the distinction between popular and learned words, so-called, is breaking down, there are words peculiar to the learned professions—words that are taken over bodily from foreign tongues, without going through any process of phonetic change. This is really a specialized form of borrowing.

Words that are *etymologically the same,* though *differing in form,* are called *doublets.* Words frankly adopted from another language are called *loan-words.*

Of the hundreds of doublets in English, a few pairs may suggest how often the relationship may be disguised:

amiable amicable
balm balsam
beaker pitcher
bench bank
brother friar
brown bruin
cave cage
cell hall
chaise chair
core heart
crate hurdle
crypt grot
dainty dignity
doge duke
entire integer
extraneous strange
fabric forge
faculty facility
flush flux
fungus sponge
gaffer grandfather
guard ward
gypsy Egyptian
illumine limn
iota jot
kirk church
knot node
label lapel
locust lobster
mentor monitor
minster monastery
mint money
moment movement
musket mosquito
naïve native
name noun
nucleus newel
outer utter
paddle spatula
paddock park
paralysis palsy
parole parable, palaver
parson person
patron pattern
pause pose
porch portico
priest presbyter
prime foremost
ransom redemption
rover robber
saliva slime
shirt skirt
skirmish scrimmage, scaramouche
tight taut
word verb
zealous jealous
zero cipher

Loan-words are generally less difficult to trace; they tend to retain their original forms: *toreador,* from bad Spanish; *spaghetti,* from the Italian; *mamzer* (a 'bastard'; a 'clever fellow'), from the Hebrew; *bakshish,* or *baksheesh,* (a 'tip'), from the Persian. Such borrowings are to be distinguished from words like *candy. Candy* is derived ultimately from a distant tongue, going back to Arabic and Persian *quano,* 'cane sugar,' which in turn goes back to Sanskrit *khanda,* 'lump sugar,' from *khand,* 'to break.' More directly, however, it comes to us through French *sucre candi,* or 'sugar-candy.'

What happens when the popular mind is released upon an etymological problem is strikingly illustrated in the attempts to discover the origin of the word *jazz. Jazz* is an exceedingly young word; it is little more than twenty years old. Yet it still belongs to a list of words that offer resistance to the most earnest etymological effort.

Jazz has been referred to (1) a gentleman named Jasbo Brown, (2) to the term *jazzbo* in the sense of a grand *finale,* (3) to the creole patois of New Orleans, as commented upon by Lafcadio Hearn, in the sense of "speeding things up," (4) to another gentleman named Razz, who had a band called Razz's band, (5) to still another gentleman named Charles, or Chaz for short—an illiterate drummer who, at the cry of "Now, Chaz!" from the leader of the band in which he played, would let loose at the end of the first chorus, (6) to a word translatable by the most forbidden of four-letter vocables. The creole word to which Hearn referred was supposedly taken from the Negroes by the creoles. But the creoles, in the French verb *jaser,* meaning 'to chatter,' 'prattle' or 'to blab,' had a word closer to their normal vocabulary. Such a word may well have become contaminated with the African.

I cannot pretend, in the absence of documentation, to offer an answer to this etymological problem. Such explanations as those depending upon a person's name seem, at first sight, silly. Yet we owe countless words to the names and personalities of human beings, and it is not impossible—even if it is unlikely —that *jazz* came from such a source. In its musical sense, the

word does not appear to have got into print until October 27, 1916, in "the showman's Bible, *Variety.*" [6]

In the early days of William Christopher Handy, "the father of the blues," the word for speeding up a performance of music was not *jazzing* it up, but, as he has told me, *jubing* it. Is this verb *jube* from *jubilee?* Or can it be related to the dance called *juba,* which is not a little jazzy in character? Or can *juba* be related to *jubilee?*

Speaking of Negro forms, there may be a hint, in one of the lectures of Max Müller, as to the origin of the Negro term pronounced nowadays *hi-de-ho.* In his Third Lecture [7] Müller has a long quotation that is identified only as having been "copied from an American paper, and signed *Marcel.*" Listing various Negro contractions, Marcel speaks of *huddy,* pronounced *how-dy* by the purists among the Negroes. The term may be derived, suggests Marcel in parentheses, from "How-do?" Then a simple song is quoted:

> *In de mornin' when I rise,*
> *Tell my Jesus huddy O,*
> *Wash my han' in de mornin' glory,* etc.

My own suggestion is that the origin of *hi-de-ho* may be found in this naïve salutation to the Lord, just as the origin of *jubing* a piece of music may be found in the exalted spirits of the jubilee.

In any case, the suggested etymologies help to show what a complicated matter a true etymology may be.

Etymologizing after the fact is an entirely human failing. During the seventeenth century, for example, there was a much-discussed theory that the Indians represented certain of the lost tribes of Israel; at once Indian names and words were twisted into a semblance of Hebrew. *Iowa,* by a facile process, became a form of *Yahweh* or *Jehovah.*

Part of this Indian-Hebrew cult was the belief that Ophir

[6] This is the date given by Nicolas Slonimsky in his invaluable *Music since 1900,* an encyclopædic survey, p. 170.

[7] *Lectures on the Science of Language,* sixth edition, pp. 75–80.

was in the New World, and that the aboriginal Peruvians were descended from Ophir, fifth of the line of Shem.

Goropius, who supported this fantasy, maintained also that the language of Paradise had not been Hebrew, but Dutch; Juan Bautista de Erro maintained, some two hundred and twenty years later (1815), that Basque was the language of the Garden of Eden. "They were perhaps unaware," comments Walter Hart Blumenthal, "that Andé Kempe in 1569 decided that God spoke to Adam in Swedish, that Adam replied in Danish, and that the seductive serpent addressed Eve in French!" [8] Naturally, there would not be lacking those who declared that the tongue of Eden was the Ayamará of Peru; others awarded that honor to Algonquin.

Under the circumstances, then, Montesinos—a Dominican missionary who flourished in the neighborhood of Lima from 1629 to 1642, and who believed that Peru was Ophir—would have little trouble in etymologizing *Ophir* into *Peru*. *Peru* was merely a corruption of *Ophir*. Transpose the syllables and you get *Phir-o;* from *Phiro* to *Phiru* to *Piru* to *Peru* is simple—on paper.

If *Iowa* is *Jehovah,* certainly *Peru* may be *Ophir*. The name *Peru* appears to have been unknown to the Incas, but a minor matter such as this never troubles a pseudo-etymologist. One early investigator even affirms that he heard frequently in the mouths of the southern Indian tribes of South America the sacred notes *Ha-le-lu-yah*. A noted Jewish leader of the early nineteenth century, inviting the Jews of the world to emigrate to a Utopia that he had established in the United States, on an island near the Indian reservation of Tonawanda, included the Indians, with all other Jews [!] in his call. Among the numerous affinities that he beheld between the Indians and the Jews was the "affinity of their [i. e., the Indians'] language to the Hebrew."

There is aural as well as optical illusion.

[8] *In Old America,* p. 26.

§ 4. THE BANKRUPTCY OF PHONETIC ETYMOLOGY—LINGUISTIC GEOGRAPHY

During the year 1919 there appeared, in Paris, a study upon *The Defectivity of Verbs,* with the somewhat startling subtitle, *The Bankruptcy of Phonetic Etymology.* It was signed by Jules Gilliéron, who had been famous for some fourteen years as the foremost proponent of Linguistic Geography.

The revolt against conventional phonetics and linguistic study was already old. Its patron saint, so to speak, was Hugo Schuchardt, and well in the forefront was Karl Vossler, known in the United States for his study of Dante. The details of the revolt are not for beginners; the essence of it, however, is important. The idealistic school maintained that the laws of sound-change, and the etymological science founded upon these laws, gave insufficient attention to the human spirit. That spirit was manifested in every process of language, and, since at bottom the human species is much the same in all times and climes, the spirit was responsible for something fundamental in all linguistic expression—something that persisted beneath and above all differences.

Too much attention, moreover, had been given to the standard languages, and not enough to the dialects. In fact, the difference between dialect and standard language was regarded as unreal, artificial. A deeper study of dialects, it was held, would reveal much that had been overlooked in the matter of languages in general, and of word-development and meaning-development in particular. The school of the linguistic geographers made, and inspired, a study of dialects all over Europe; it prepared a series of linguistic atlases; it came to important conclusions, based upon the study of these atlases.

The traditional phonetic etymology, it held, was largely illusory. Essential factors were overlooked. The so-called laws of sound-change were not all-powerful, not unexceptionable. Words changed in sound not only because certain changes occurred in adjustment of vocal muscles and in mental images of the adjustment, but also because too many words developed

into similar sounds—i. e., *homophones;* and too many others came to mean things too closely alike—i. e., they became *homonyms.* The people, in their need of keeping words distinct, would make certain changes. Words that sounded too much alike would receive conscious treatment, intended to make useful distinctions in pronunciation. Words that were too much alike in meaning would undergo like treatment for like reasons.

For example, the Latin words *apis, navis* and *napus* mean, respectively, 'bee,' 'ship' and 'turnip.' There are dialects of French in which *apis* becomes *ef, navis* becomes *nef,* and *turnip* becomes *nef.* As *bee* is feminine in French, *ef* is preceded by *une; une ef* easily becomes understood as *une nef.* Here we have three words, of distinctly different meaning, but of a most uncomfortable likeness in sound. What happened? *Nef* (turnip) was replaced by *navet; nef* remains as the *nave* of a church, but as a ship in the literal sense it has given way to *navire.*[9]

Etymological change, then, is not limited to rigorous process; it is affected by the practical needs of the people, who, for the rest, in their reaction to language are not different from the more learned strata of society.

I mention these considerations in order to remove from phonetics and semantics (of which etymology is an amalgam) the suggestion of ultra-human operation. I doubt very much that phonetic etymology is bankrupt, or that we shall have to scrap the methods and the materials of phonetics and semantics as we know them. That a certain modification is in order seems none the less true.

We are thrust upon the fallacy inherent in the use of the word "law" to describe the regulations of phonetics or of grammar. The emphasis of Gilliéron and his fellows upon the study of the single word—the removal of that word from supposedly immutable laws such as those that govern the planets—the reminder that linguistic laws are not laws enabling one to

[9] These data are from *An Introduction to Romance Linguistics,* by Iorgu Iordan and John Orr. Though not a work for beginners, it is one of the finest studies of its kind, and recommended especially to more advanced readers.

predict linguistic occurrences as the astronomer predicts an eclipse, since the operation of the "laws" is not continuous, and not invariable—these considerations suggest once more that the use of the word "law" is unfortunate, and that it helps to mislead even the linguists.

CHAPTER XV

WHAT ARE WE TALKING ABOUT? OR APPLIED SEMANTICS

It turns out that, in the structure of our languages, methods, "habits of thought," orientations, etc., we preserve delusional, psychopathological factors. ALFRED KORZYBSKI, in *Science and Sanity.*

Annihilate him with a word
That every one has often heard,

Opprobrious, yet not unlawful
And vaguely hinting something awful,

A word that others think a hoodoo,
But understand still less than you do.

Revile the rascal as a Tory
(Although the term is old and hoary),

Or, as his politics may vary,
A red or a reactionary,

A Dodo, Fascist, Communist,
Or Economic Royalist.

Then, though your epithet to none
Discloses what the villain's done,

To multitudes he'll stand convicted
Of crimes to which they're not addicted.

ARTHUR GUITERMAN [1]

§ 1. POLITICS, STICKS, AND STONES

IT IS AN ILLUSION BRED BY THE DICTIONARY THAT WORDS "mean" other words. They acquire their meaning, however, not from printed definitions but from living use. By *applied semantics,* then, I mean the study of words not as solitary entities, not as subjects for phonetic, semantic, and

[1] "The Art of Calling Names," New York *Herald Tribune,* November 19, 1937.

etymological elucidation, not even as factors in the stream of speech, but as factors in the stream of meaning.

Can words trick us? Or is the treachery ultra-verbal? Does the treachery have its source in the mind behind and beyond the word—in the mind of which the word is a tool?

The mind supposedly is the seat of reason. It is a human failing, however, to use the mind not so much for reasoning as for rationalization—that is, to employ the mind in discovering justifications for a belief or an attitude already decided upon. This process is called *wishful thinking,* and is the opposite of that which might be called *thoughtful wishing.* The first allows the wish to be father to the thought; the second tries to set the wish in an atmosphere of realistic thinking.

Science, broadly considered, attempts to remove the element of emotionality, of wishfulness, from the investigation of data. Art, broadly considered, transforms the emotionality, the wishfulness, into an instrument of poetic power. We are not deceived when we acknowledge the fiction.

It follows, then, that science and art are different dialects of the human mentality. It is not, except for uncomprehending spirits, a question of a superior or an inferior dialect; it is a question of adaptability. Even a professional mathematician does not make love with mathematical symbols. The language of the laboratory is not the language of the concert hall or of the art gallery.

Because, in the daily pursuits that make up the irrationality of living, we become mentally and emotionally tangled up with realities that resist our desires and our wills, we are very likely to reveal our confusion in our language. By confusion I do not mean only the evident clash of reality with our wills and desires, but the more subtle evidences of that clash—evidences of which we may be totally, or only half, aware.

We speak, we write, and we say many things that are illogical, beyond our power to prove; we say and write things that are saturated with emotional prejudice; we forget that words are not actual things, and that they require constant redefining; that they may change their meaning between one

usage and another, in the selfsame sentence. We forget that not every word stands for something that has actual, tangible existence. We forget that not everything that exists has a word for itself. The most concrete word is an abstraction, a symbol.

Spinning words, we are much like the spider spinning its web out of its own body. We, however, unlike the spider, may be enmeshed in our own web.

Applied semantics is a practical discipline, related to life outside the study, where words are tools and not topics for analysis. It is a discipline that is needed quite as much by scholars as by the man in the street. A few actual examples of words as stumbling-blocks, as false sign-posts, will make clear the need for such discipline. Thought and language may not be identical, but modern man does much of his thinking with words. Unclear expression and unclear thinking make for confused living.

Political terms, as they are used so frequently in the heat of controversy, acquire an emotional connotation so strong that it is almost impossible to employ them for the more scientific, the more contemplative or even rational, moments of living. Whatever *Democrat* may have meant in its origins, or *Republican,* they both tend at the height of a campaign to mean friend or enemy, the respective significance depending upon the party to which the bearer belongs. As for the term *Socialist,* it rouses Democrat and Republican alike to gestures of hostility. The term *Bolshevik,* or, better still, *Communist,* becomes so encrusted with non-political significance that it loses any sharpness of outline with which it may have begun, and grows into what has been called 'a smear-word'—a word that takes on whatever emotional color the speaker may at the moment desire it to assume.

Terms belonging to the controversies of religion suffer a like degeneration, and for like causes. Such terms, whatever their uses within the zones of their origin, defeat clear thinking precisely because they have become so overladen with emotional attitudes. It is difficult to carry on discussion, and much more

so to carry on debate, with words that contain within themselves a prejudgment. It is possible for words to acquire so many meanings, so many derivative emotional connotations, that they lose their utility as elements of clear speech and clear thought.

In an earlier chapter I examined the words *romanticism* and *classicism,* and showed how they had lost their original clarity. Used in literary or musical discussion they must be carefully defined, and even then misconceptions easily arise. In contemporary politics, a number of words have long been wearing away and suffering like defacement. Prominent among them are *radical, liberal, conservative.*

Each of these is an important, even a noble, word. It is not hard to know what is meant by *radical* in mathematics, for example; the word is derived from Latin *radicalis,* a derivative of *radix,* meaning 'root.' *Radix* is thus applied to anything that serves as, or suggests, a root. One older meaning was the root, or source, of anything. In philology it means the *etymon,* or root, of a word. In botany it means the root of a plant. The *radish* is an edible root. In mathematics a radix is "a number that is arbitrarily made the fundamental number of a system of numbers; a base." Without a grounding in mathematics this may seem obscure; it is, however, in its own realm, stable.

In politics, however, the word *radical,* like all political words, takes on what might be called a floating significance. A radical himself will tell you that he is so called because he wishes to get down to the roots of things; his opponent, the conservative, will tell you that the radical wishes to tear things up by the roots. They agree only on the roots.

The *conservative* will tell you that he wishes to preserve the existing order, and by that same token (though not too logically) all order. There is really no radical who wishes to destroy everything; there is no conservative who wishes to preserve everything. One course would mean chaos; the other would mean stagnation.

Between radical and conservative stands the *liberal.* Naturally, in view of what fallible human beings may be, to the

conservative the liberal takes on the hue of a radical; to the radical the liberal takes on the hue of a conservative. *Liberal* thus becomes a shuttling term. At its root is the Latin *liber,* 'free.'

What, then, could be more desirable in a citizen than that, speaking etymologically, he should be liberal, conservative and radical, all at once? That is, as a liberal, favoring free, uncircumscribed thinking; as a conservative, favoring the preservation of basic institutions; as a radical, desiring to know conditions from the root up, and therefore to make scientifically the adjustments that liberal thought finds necessary and conservative principles find feasible. At this juncture all three arise and, in chorus, protest against an evasive policy of compromise.

Dorothy Thompson, speaking on the 14th of November, 1937, at the Lotos Club in New York, devoted some much-needed attention to these three treacherous terms. "We are living," she said, "in the midst of lost words." *Radical* was a "glorious word originally"; to-day it has become a label to designate those "who accept with blind obedience a dogma which will not stand the test of disinterested thinking." *Conservative,* too, was "a beautiful word, full of meaning and very feminine." (I do not know whether Miss Thompson was thinking of Havelock Ellis and his dictum that woman is the conservative element of the human race.) Once it denoted those who "hold to that which is good," but now it is used as a shibboleth by those who "believe that income tax is too high and that a thing which has been a convention for a long time is inherently good." To the speaker, *liberal* was "the most American, the most humane of all words" (this phraseology is that of the reporter),[2] "one whose spirit was instilled in the vernacular phrase, 'Give men a break.' "

Miss Thompson's ideal was to be "a radical as a thinker, a conservative as to program, and a liberal as to temper." It is, in the arena of active politics, an all but impossible, a superhuman, ideal.

[2] As related in the press on November 15, 1937.

As for living in the midst of lost words, that is not a condition descriptive only of contemporary life. We are always losing, always gaining, words; words are always losing elements of their meaning, and acquiring new overtones. Johnson, in the Preface to his Dictionary, speaks of Swift, who in "his petty treatise on the English language, allows that new words must sometimes be introduced, but proposes that none should be suffered to become obsolete. "But," continues Johnson, "what makes a word obsolete, more than general agreement to forbear it? and how shall it be continued, when it conveys an offensive idea, or recalled again into the mouths of mankind, when it has once by disuse become unfamiliar, and by unfamiliarity unpleasing?"

A language can no more be guarded against the obsolescence of its parts than can the human body against old age. Language, too, has its liberals, its conservatives, its radicals. Swift, in his essay, was conservative in a literal, and likewise in a utopian, sense; for he asked the impossible. We cannot long stay the natural evolution, or devolution, of words. What we can do, however, is to be on our guard against the various shifts in sense, against the emotional coloring that makes words less trustworthy as the exponents of thought and as the elements of thinking.

The rhyme of our childhood,

> *Sticks and stones may break my bones,*
> *But names will never hurt me,*

is not true. Names can hurt; names can cause sticks and stones to be thrown.

§ 2. MACHINES, TREES, AND PROPAGANDA

A woman, watching the operation of an intricate machine, is led to exclaim upon the wonders of machinery. "Why," she cries, "this is truly human!" Of course it is truly human, and in a deeply creative sense. For the machine has been made by man. It is an extension of his limbs, his energy—of his mind. If

machinery seems human, it is manifestly because, being the product of man's ingenuity, it is as much a pattern of his mind as is the word.

A poet, the lamented Joyce Kilmer, marvels at nature much as the woman of the preceding paragraph marvels at artifice.

Poems are made by fools like me,
But only God can make a tree.

A little thought will reveal the simple truth that the same God who makes the trees makes the fools who make the poems. There is also an unrevealed pun upon the word *make,* for it does not really mean the same in the first line that it does in second. Is this a fault of words or of the mentality behind the words?

To return to the machine: When, in 1815, the toilers of England, in their rage against the replacement of manual labor by machinery, turned upon the new mechanisms and wrecked them, they were acting, perhaps, too humanly. In their own way, they exhibited as false a reaction to the machine as did the woman of our anecdote. That is, they personified it. They proceeded against it as if it, like them, shared human attributes; as if it were a personal, rather than an economic, enemy. Destruction of machines merely postpones settlement of the problem machine-versus-man. It even confuses the problem, which is not machine-versus-man so much as machine-in-the-best-interests-of-humanity.

In the case of the historic machine-wreckers we have a confusion of thinking that creates a confusion of words. This, I believe, is the normal course of confusion. That confusion of words can create confusion of thinking is, however, only too true. Part of the tremendously important task of clarifying all such confusion is to make as clear as possible, and to keep as clear as possible, the relationship between the word and the thing or quality. There is, unfortunately, such a process as thinking *in* words instead of thinking *with* them. Language can both clarify thought and obscure it. There is sleight-of-word as there is sleight-of-hand.

Human weakness, again unfortunately, lends too ready aid to such deception. For, before we are deceived, we are largely self-deceived. Our finer thinking is forever at war with our looser wishing. And if, as has already been said, thinking is a process of selection, the word "finer" may suggest not an æsthetic quality so much as the close-woven screening of a very fine sieve.

I come, in one of the leading newspapers of New York, upon an article devoted to "Propaganda." [3] Mr. George E. Sokolsky, after making it clear what he understands by the word *propaganda,* proceeds to give his personal feelings about the term and the thing. It is interesting, by the way, to observe that he takes, as characteristic meaning of the word, not its original sense of spreading a faith or an idea, but its derived sense of providing a point of view, "usually somewhat distorted and always biased. It is never objective and it tends to overemphasis."

Mr. Sokolsky frankly confesses to a favoritism for propaganda as thus understood.

> I personally am a confirmed propagandist. I should find life an awful bore if there were nothing to be a propagandist for. When my enthusiasms become red hot I write and lecture and argue about them because I want to convert all the world to my point of view.
>
> And I like nothing better than to meet another propagandist and to have it out with him. It is fearfully dull to argue with those milk-and-water scientists who see all sides of all questions and never get high blood pressure on any subject. They are usually intellectual sissies.
>
> What I like most is a fellow who fights with horseshoes in his gloves. Suppose he does not state his case fairly; I'm no cripple and the audience is not a boob. The only real danger is that somebody will repress us both. . . .

This, I believe, is the pith of Mr. Sokolsky's argument. It is a truly human commingling of praiseworthy social emotions and unpraiseworthy individualistic emotions. Or, lest we be-

[3] Editorial page of the New York *Herald Tribune,* November 15, 1937.

come bogged in such treacherous pseudo-antitheses [4] as social-individual, let us rather say, a truly human commingling of clear and muddled thinking.

For example, does Mr. Sokolsky really mean that he "likes most" a fellow who fights with horseshoes in his gloves? Nothing of the sort; the phrase is used metaphorically. Sokolsky, at a prize-fight, would boo a pugilist who had somehow managed to elude the vigilance of the authorities and padded his gloves with iron. The metaphor was chosen most unadvisedly. "The audience is not a boob." Again a figure of speech, and again chosen most unadvisedly. For, if the history of thought reveals anything, it reveals that the "audience" *is* "a boob," and that nobody knows this better than the unprincipled orator and the unprincipled propagandist. Indeed, by Mr. Sokolsky's very definition, propaganda is unprincipled to begin with.

We have, however, but scraped the surface of the treacherous thinking in this passage. First, the writer flouts unemotional thinking; this is a fallacy of primary danger to the human race. Second, he is led to malign the few scientific minds that humanity has developed against this menace. "Then it is dull to argue with those milk-and-water scientists. . . ." What a confusion is here! What could have been duller—to the outsider—than the vast amount of plodding research that went to discover the sources of such scourges as smallpox, cholera, yellow fever, diabetes, diphtheria, syphilis? "Milk-and-water" indeed! A test-tube may not be so glamorous as a baseball and bat (it is Mr. Sokolsky who, inferentially, establishes that opposition, not I); but one does not use bats in laboratories any more than one raps out home runs with a test-tube.

To see all sides of a question, so far from being the attribute of a sissy, is one of the rarest achievements in the long, long history of man's ascent from the condition of the brute. "Intellectual sissies," indeed! By what process of mentation Mr.

[4] By the use of *pseudo* in this connection I do not mean that "social" and "individual" are never antithetical in meaning, but that frequently they are complementary rather than hostile.

Sokolsky establishes a correlation between high blood-pressure and masculinity, and between low blood-pressure and femininity or sissification, I do not know. I know only that the expression "sissies," on his part, contains yet another fallacy —that of regarding male attributes as invariably strong and right, and female attributes as invariably weak and wrong. To make matters worse, he had to write, "*usually* intellectual sissies." An Einstein, a Darwin, a Newton, an Aristotle, a Galileo—representatives of men and mentalities that have faced death from disease and at the stake, in the service of clear thinking and dedication to man's higher potentialities—represent to Sokolsky a type of intellectual sissy; but a man who knows that he is fighting "with horseshoes in his gloves," yielding to every illusion that emotional thinking can provide—the very type of man who, under the temptations of the mob spirit, would burn a Galileo, stone a Newton, disfranchise an Einstein —is not a sissy, is not milk-and-watery, but is a useful and commendable member of society!

Our problem, again, is: how much of this evil mentation is verbal, and how much goes back of the word to a pattern of mind? Certainly the word *propaganda* is one of the most dangerous of contemporary terms. Yet in the article that caused this discussion, the writer shows from the beginning that he is aware of the dangers; then blithely he yields to them. From the facile discovery that men distort the truth in the interests of their private desires he proceeds to an acceptance of that vice and to a condemnation of those who do not share it and try to rise above it.

The error of this thinking is not verbally induced; indeed, it seeks to impress its fallibility, its harmfulness, upon the vocabulary.

§ 3. LOCKE, OGDEN, AND MISUNDERSTANDING

That professional word-men (logicians and semanticists) are not immune to the infections and contagions spread by words is only too evident.

Let us consider first an example from the logicians of yesterday.

The third book of John Locke's *An Essay on the Human Understanding* contains toward the end a long passage upon deception in which it is possible that, for all his wariness, the author himself was partly self-deceived. Locke, having considered, in his hyperlogical and somewhat dry, repetitious manner, the latent dangers of words, turns his attention to the perils of metaphorical language. Not without great courage, he writes:

> But yet, if we must speak of things as they are, we must allow that all the art of rhetoric, besides order and clearness, all the artificial and figurative applications of words eloquence hath invented, are for nothing else but to insinuate wrong ideas, move the passions and thereby mislead the judgment; and so indeed are perfect cheats; and therefore, however laudable or allowable oratory may render them in harangues and popular addresses, they are certainly, in all discourses that pretend to inform and instruct, wholly to be avoided; and, where truth and knowledge are concerned, cannot but be thought a great fault either of language or the person that makes use of them. What and how various they are, will be superfluous here to take notice; the books of rhetoric which abound in the world will instruct those who want to be informed. Only I cannot but observe how little the preservation and improvement of truth and knowledge is the care and concern of mankind; since the arts of fallacy are endowed and preferred. It is evident how much men love to deceive and be deceived, since rhetoric, that powerful instrument of error and deceit, has its established professors, is publicly taught, and has always been in great reputation; and I doubt not but it will be thought great boldness, if not brutality, in me to have said thus much against it. Eloquence, like the fair sex, has too prevailing beauties in it to suffer itself ever to be spoken against. And it is vain to find fault with those arts of deceiving wherein men find pleasure to be deceived.

Locke has just been speaking of the difficulty that men create by entering upon discussion without previously defining their terms. Earlier in the book he has written, "This, I think, I may at least say, that we should have a great many fewer disputes in the world, if words were taken for what they

are, the signs of our ideas only, and not for things themselves." This has become an axiom of writing and intercourse, yet the disputes and the misunderstandings continue, not alone through incomprehension but through sophistry. It is at sophistry, indeed, that he aims in the passage upon rhetoric, and although his language may be somewhat stiff and outmoded, his admonitions are as badly needed to-day as they were in his own day.

Yet Locke, who understood well the concrete basis of all abstract language, must have known, too, that "artificial and figurative applications of words" are a necessary form of linguistic expansion. Without this figurative aid, language would have remained a starkly limited process. To borrow Locke's own figure about the fair sex, we might say that his diatribe against figurative language too much resembles the diatribes of misogynists, who, having been betrayed by a woman's beauty, find all beauty thereafter a snare and a delusion.

It is important—and it was never more important than now—to be on our guard against the Lorelei of language. It can win us—to apply Shakespeare—with honest trifles (words) and deceive us in deepest consequence (meanings). Yet to interpret Locke by the letter would be to abandon, through gross insensitivity, the conquests and the solaces of poetry, and of all such language as rises above literality. This is something that even science, for all its progress toward a language unhampered and unclouded by emotional references, cannot and does not really wish to achieve. Mankind, outside the laboratory, is interested in other things than demonstrable truths. It is too easy, in fact, to go astray with such words as *truth*. Communication between persons is, even for those who engage in the most lofty pursuits of the intellect, largely an emotional exchange. To live solely by "logic" (and I am not sure of what "logic" means in such a context) would suggest something monstrous, unfeeling, and quite inhuman.

Are we therefore to surrender the attempt to rid language of its emotional pitfalls? No. For the sake of the very emotions involved we must insist that words—like all good signs—point

clearly to what they designate. Mathematics, for example, is a language; this does not mean, however, that all language must approach the cold, abstract character of mathematics. "Euclid alone," sings Edna St. Vincent Millay, a most un-Euclidean poet, "has looked on Beauty bare." This is an austere passion. We cannot imagine, outside of caricature, a Tristan and an Isolde making love through algebraic symbols. When lovers intimately speak, their words are rather music than speech, and need have as little verbal meaning as music itself. In an ideal world, perhaps, lovers should sing, not speak. They do so in opera, which is one of the secrets of the fascination that the hybrid form exercises upon so many.

The fact seems to be that we all speak not one language but many. Some of these languages demand far more accuracy than the others.

Words, to risk a paradox, mean more than they mean. They are evidence, not only of the life of fact but of the life of fancy. They bear witness not only to a life of thought, or logic, but even more to a life of the emotions, of the non-logical, non-thinking process. Man does not live by logic alone, nor does language. Grammar and semantics, like the Sabbath, were made for man, not man for the grammarians and the semanticists. To anatomize poetry, or the metaphorical, daily habit of speech as if it were intended to be taken literally is as useless and humorless a pursuit as to turn mathematics into metaphors.

Translation is not only a process that involves a transfer of meaning from one language to another. It involves, almost as much, a transfer of meaning, in the selfsame language, from speaker to hearer. As truly as man errs the while he strives, so does he translate as long as he speaks and listens. To converse is to translate—to recreate meanings, moods and metaphors. "One of the hardest things in the world," wrote the author of *Alice in Wonderland* to Miss Dora Abdy, "is to convey a meaning accurately from one mind to another." [5]

[5] S. D. Collingwood, *Life and Letters of Lewis Carroll* (Century Co., 1899), p. 331.

My second example of a semanticist trapped in his own words is C. K. Ogden, inventor of Basic English. The invention itself, which in many respects is a great practical advance over other types of universal language, and which even has importance for the learning of one's native language, whatever that language may be, is considered in my chapter "Forward from Babel." I am interested, for the moment, in Mr. Ogden's exaggerated claims for his invention, and in the way he falls into a snare woven by his own words.

"What the world needs most," he proclaims, with as much humor as truth, "is about 1000 more dead languages—and one more alive. The so-called national barriers of to-day are, for the most part, ultimately language barriers. The absence of a common medium of communication is the chief obstacle to international understanding, and consequently the chief underlying cause of War." [6]

Basic English, it appears, is not a sure protection against violation of Basic Logic.

Mr. Ogden has gone astray between two different meanings of *misunderstanding*—and he a semanticist of power and originality, co-author, with Mr. Richards, of *The Meaning of Meaning!* In the first instance (*international misunderstanding*) the word means failure to achieve perfect translation of meaning. *Misunderstanding* as a "chief underlying cause of War," on the other hand, means a difference of opinion, of purpose, and may be the result of *understanding* each other only too well! Does Mr. Ogden seriously mean that nations go to war because they translate imperfectly each other's language —that there would be no war if peoples spoke the same language? Did not our North and our South speak the same language? Do not the Spanish Loyalists and the Spanish Rebels speak the same tongue? Have there not, throughout history, been disastrous civil wars, waged by those speaking a common idiom?

Certainly the misunderstanding of an important word or

[6] C. K. Ogden, *The System of Basic English* (Harcourt, Brace and Co., 1934), p. 18.

phrase might be a contributory cause of a war—*contributory,* not the *"chief underlying cause."*

When so nimble-witted an expert as Ogden, in a paragraph emphasizing the importance of a common medium of international communication, himself falls into an error of communication, should not we lesser spirits handle our words with greater care than ever?

It should be clear that the basic error here is one of thinking rather than of expression; or, to put it in a slightly different way, one of an imperfect correlation between thought and expression. A loose employment of words betrays us into loose thinking; loose thinking effects a like betrayal of expression.

The nine symphonies of Beethoven have been divided into those of even number and those of odd. It has been observed that those of odd number are the masculine works; those of even number, the so-called feminine. That is, the odd ones are more powerful in theme and structure; the even ones, simpler, more frankly melodious, less intricate in facture. Such classification is imperfectly scientific or æsthetic; it is based, of course, upon a superficial observation of the sexes in civilized life. Nevertheless, the use of masculine and feminine to denote strong and weak (whether in daily life, or in the naming of rhymes) is now an almost ineradicable habit of language.

See, then, how the odd-numbered symphonies of Beethoven are subtly transformed into the superior, because they are masculine; and the even-numbered into the inferior, because they are feminine. Such facile classifying ignores altogether the element of contrast in the creative personality; it ignores, in fact, the "masculine" and "feminine" elements, so-called, that enter into the composition of any single symphony. It ignores, too, the weak moments in the "strong" symphonies and the strong moments in the "weak."

The illusiveness of this language goes further. In discussing which of the Beethoven symphonies will be carried over into the musical education of the proletariat, a Communist critic rejects the even-numbered symphonies as ill-befitting a proletarian state. Why? Because, presumably, they represent the

feminine, the weak, the inactive principle. The fallacies of this attitude would occupy many pages of a treatise on logic. Because the word *proletarian* is associated with an economic revolution, because revolution is naturally associated with violent activity, therefore the tastes of the future proletarian state will be—so runs the thread of thought—in favor of music that portrays tumult. The use of the arts as a contrast to the utilitarian requirements of life is readily overlooked; the psychological, the biological demand for contrast in the work of art itself is overlooked as readily. I suspect that he who rejects, through insufficient understanding or mistaken fervor of propaganda, the even-numbered symphonies of Beethoven has ill understood the symphonies of odd number.

§ 4. THE TREACHERY OF WORDS—OR OF MIND?

I should like, finally, to consider certain phases of a recent effort to popularize the study of word-significance. For we have become, of late, more word-conscious than ever; or, perhaps, meaning-conscious would be the more precise term. To paraphrase Cowper's famous lines, in *The Tyranny of Words* we have a newly converted semanticist who does everything but

Stuart Chase
A panting syllable through time and space.

Suspicion of words is nothing new under the sun.

> And therefore the ill and unfit choice of words wonderfully obstructs the understanding. Nor do definitions nor explanations wherewith in some things learned men are wont to guard and defend themselves, by any means set the matter right. But words plainly force and overrule the understanding, and throw all into confusion, and lead men away into numberless empty controversies and idle fancies.

The quotation is from Francis Bacon's *Novum Organum,* the first book of Aphorisms, Number xliii. Such excerpts as this and the passages that I have quoted from Locke might, with slight changes in vocabulary and punctuation, have been written by the latest disciples of Messrs. Ogden, Richards, and Korzybski; indeed, they have. There are moments when Locke

inveighs against such abstractions as "sympathy," "antipathy," and "justice" in just the manner of Mr. Chase doing his valiant job upon the misleading—but not therefore empty or unnecessary—abstractions of our own day and generation. I am reminded of the title of a curious book published by David Urquhart in London, more than eighty years ago, called *The Effect of the Misuse of Familiar Words on the Character of Men and the Fate of Nations.* One of those words, Mr. Chase might be interested to learn, is *tyrant.* Mr. Urquhart had a tough time of it with the verbal tyranny.

That words partake of evil magic, then, and that they are not things, is not a new discovery of Malinowski, Korzybski, *et alii.* Yet it is good that we should be reminded again and again; for too often we hear only with our ears, just as we speak only with our lips.

We should be on our guard, however, against substituting new magic for old. Semantics is but a word. It is axiomatic in semantics, as we have seen, that not every word represents a thing—merely because we have a word does not mean that therefore we have an object; that we have no words for certain things, on the other hand, is no proof that they do not exist. The referent is that to which the word points. There are more referents in heaven and earth, Horatio, than are dreamt of in your Semantics. . . .

It is important to remember this because some semanticists —and every one of us is a semanticist, good or bad—are misled by their enthusiasm for the language of mathematics into envisioning a language that shall be drained of emotionalism.

Mathematics is *a* language—one of many that human ingenuity has devised. But *not all language is, or ought to be, mathematics.* Wishful thinking is bad wishing and bad thinking. This valuable observation does not destroy the validity or the desirability of wishing. I have known some scientists, mathematicians among them, who scoffed at poetry because it dealt in matter that did not lend itself to proof. Mathematics, as a language, had played its rôle in misleading them. They seemed actually to believe that what one cannot count is not

there. They talked as if they believed that because you cannot prove the superiority of one work of art to another, therefore art means less than mathematics. It was as if they had never heard of incommensurables.

The mathematician, and the scientist generally, work with symbols whose emotional connotations have been deadened. Emotions have no place in the laboratory. It is because Mr. Chase forgot the importance of such connotations outside the laboratory, however, that he could become semantically confused about, for example, obscenity. Let me make it clear that I have little objection to what is called obscenity, and that my attitude toward it is æsthetic, not moralistic. The problem of obscenity calls for radical semantic readjustment; the confusion would be cured appreciably by an investigation of the etymologies of our "bad" words, and an understanding of the significance revealed by those etymologies. It is only half true, nevertheless, that in the matter of the four-letter Anglo-Saxon word for sexual intercourse, and the phrase "sexual intercourse" itself, "both symbols have precisely the same non-verbal act as referent." The various terms for coitus have various connotations, *as, for that matter, has the non-verbal act itself.* If words were invariably confused with things, *coitus* would be just as objectionable as any other word for the act. Why isn't it? Because it suggests an approach to sex altogether different from the approach suggested by Mr. Hemingway's favorite quadriliteral vocable. *Coitus* suggests a scientific interest; it connotes, moreover, an interest not directly selfish, not solely physical. The word that is too vulgar to be generally printed suggests, on the other hand, indelicacy, a merely epidermal interest. It is a commonplace of semantics that there are really no synonyms in a language.

I wish I could be as sure as Mr. Chase is that "People are not 'dumb' because they lack mental equipment; they are dumb because they lack an adequate method for the use of that equipment." I wish I could be equally sure that, as he writes, "to improve communication new words are not needed, but a better use of the words we have." Elsewhere he adds, "There

is little fault to be found with the words we use, much with the way we use them." But isn't the "way we use them" intimately associated with our mental equipment? Do we think better because we use the "right" words, or do we use the "right" words because we think better?

As for the need of new words, can it be that, at this precise moment in the history of humanity, we have ceased to feel it? That up to now, languages have needed to grow, but that suddenly we have all the words we need? Will there ever be such a time? Dean Swift thought it possible to halt the evolution of speech and fix certain elements of the language for all time; now Mr. Chase implies that we can do the same with words. He will meet the disappointment of his illustrious predecessor.

That words often obstruct thought and action is only too true. That we cannot be too careful with them follows obviously. But how we are to make more careful use of them without the intervention of our mental equipment, I cannot see.

When Madame Roland bade farewell to the world, on the scaffold, she uttered a phrase that should be a slogan—and a warning—to semanticists. "O, Liberty! Liberty! how many crimes are committed in thy name!" Let us not forget, however, that the Madame spoke French; she used the word *liberté.* Is this an exhibition of academic captiousness? By no means. It strikes, rather, at the root of a fundamental semantic misconception. Many a crime has been committed, too, in the name of *svoboda,* which happens to be Russian for 'liberty.' Certainly between *liberty* and *svoboda* there is no phonetic resemblance. *It is not the mere sound of a word that makes it into a powerful agency for misleading one's self or one's followers.* Whether the word is *svoboda, liberté, liberty* or *libertad,* it serves equally well the purposes of Russian, French, American, or Spanish demagoguery, respectively.

To believe that the mere word *liberty,* or any other abstraction, carries *in itself* a power for misleading *is to revert to the ancient conception of the word as magic.* It is not the word, it is the cluster of associations that possesses the potentialities

of misleading. By that same token, the abolition of these words will hardly do away with the power of the demagogue or the folly of Demos. For other words stand ready to rush in. The new words will gradually acquire the selfsame connotative potency, and presently become as dangerous as the terms that they replaced.

The new semanticists—with whom I am for much the greater part in sympathy, by the way—exhibit an almost stigmatic petulance, as if they resented having to be as careful with words as they supposedly are. Messrs. Ogden and Richards, in their volume, *The Meaning of Meaning,* after stating their canons of a clear prose style, assure us that the canons actually produce such a style, "though not necessarily one intelligible to men of letters." This is a lower order of writing, as unfunny as the wise-crack of Mr. Van Loon, who, during a broadcast on the Curies, early in January of 1938, allowed himself to say that "the learned professors, *as usual,* were wrong." Semantics is hardly the cure for such wilful chatter. The fault lies in a permanent or passing quality of mind. Messrs. Ogden and Richards, by the way, brilliant as is their book, might have spent less energy in feeling superior and a little more in making clear the meaning of *their* meaning. A semanticist who cannot make himself clear is a bad advertisement for his subject. Physician, heal yourself! Semanticist, clarify yourself!

It is necessary, if we are to inoculate ourselves against verbomania, to understand that the real trouble lies not in the words but in the psychology behind the words. The word is but a symptom, a symbol, a sign, pointing not only to an object or a concept, but to a subject and a conceiver.

"A whole book," writes Aldous Huxley, "could be written on the way in which thought has been affected by the accidents of grammar." [7] This is true; any accident of speech, whether in the word or the word-group, may affect thought. Much thought is a sort of silent talking. A larger book, however,

[7] Aldous Huxley, *The Olive Tree* (Harper & Brothers, 1937), essay on "Justifications."

could be written on the way in which the accidents of grammar have been affected by, even caused by, the accidents of thought.

It is here, I believe, that we come upon the basic significance of the modern revolt against language as we know it to-day. That revolt, which is much older than Count Korzybski's germinal—and intensely difficult—book, *Science and Sanity,* is only in part a revolt against misused words. *It is a realization that language is still saturated by, and in its forms determined by, primitive ways of thinking.*

The objections that are voiced by Korzybski and his followers against language as it is constructed to-day were heard at the beginning of the century from Lady Welby, the sharp-spoken proponent of Significs. Lady Welby wrote, in her *What Is Meaning,* that: "Language is still in what we have to express by that vague and misused word, the 'instinctive' stage. We must raise it as we have ourselves risen from the 'instinctive' level to the volitional and fully rational plane, in the fullest sense. What we will it to be (and thus to give us) that it must inevitably become. . . . Significs is a practical means of calling attention to the backwardness of language in comparison with other modes of communication, and to the urgent need of stimulating thought by the creation of a general interest in the logical as well as the æsthetical value of all forms of Expression. . . . Our present vocabulary, and especially our metaphor, only fits the pre-Copernican or at best scholastic order of things, and is pre-scientific in a sense which would have aroused energetic protest and entailed effective reform in the days of those classic forefathers whom we all profess to revere." [8]

Lady Welby's *significs* has been regarded, in some quarters, as a harsh-sounding synonym for semantics. It appears to be more, carrying the question of meaning out of language into all the zones of life and living.

In this country the neo-semantic movement is slowly discovering Korzybski as a rallying-point. It is a relativist move-

[8] V. Welby, *What Is Meaning* (The Macmillan Co., 1903), pp. 52, 57, 59.

ment, intent upon discovering structural relationships rather than over-simplified schemes of cause and effect. It is an effort to refashion language in the image of the contemporary mind, not that of the primitive to whom genders and verb-endings and metaphors and other linguistic habits were a clumsy apparatus—as clumsy as the first cart in comparison with the latest model of transatlantic flyer.

I believe that it is an error to regard the problems of the new semantics as being "mainly verbalistic," except as all problems of the mind must be expressed in words, and therefore must reveal something of the mind that does the expressing.[9]

Korzybski himself, in the introduction to his book, which is of primary importance to all advanced students of language, says: "It seems obvious, once stated, that in a human class of life, the linguistic, structural, and semantic issues represent powerful and ever present environmental factors, which constitute most important components of all our problems. . . ." [10] To speak only of words, or even mainly of words, when it is a relationship between mind and expression that requires restatement, is to fall back into the primitive's veneration of, and misunderstanding of, the word. Language, says one of the leaders in the new semantics, "is no mere signalling system. It is the instrument of all our distinctively human development, of everything in which we go beyond the other animals." [11]

Semantics is no sham battle between "good" and "bad" words. Words do not possess absolute character. They acquire their virtues or their defects, as they acquire their meanings, from their context. Their characters, their values, are relative.

[9] See, for example, the article on "General Semantics," by Douglas Gordon Campbell, in *The American Journal of Psychiatry,* January, 1937. After an excellent synopsis of Korzybski's new semantics, Dr. Campbell, who sub-titles his discussion, "Implications of Linguistic Revision for Theoretical and Clinical Neuro-Psychiatry," comes to the conclusion that these "vexing" problems are "mainly verbalistic." He suggests, early in the article, that "words or gestures are to the psychiatrist what instruments are to the surgeon." I wonder how many psychiatrists would agree to what looks, to a philologist, like a non-Korzybskian use of metaphor!

[10] *Science and Sanity,* p. v.

[11] I. A. Richards, *The Philosophy of Rhetoric,* p. 131.

The problem of applied semantics represents—to continue our martial metaphor—a real battle between straight thinking and crooked thinking, between effective and ineffective expression, in which words are the weapons, not the warriors.

We are the warriors.

CHAPTER XVI

WHAT IS GRAMMAR?

I'm very much pained to refuse,
But I'll stick to my pipes and my tabors.
I can spell all the words that I use,
And my grammar's as good as my neighbours'.
W. S. GILBERT, *Iolanthe.*

§ 1. SENTENCES BEFORE WORDS AND SYLLABLES

IN THE EARLIEST STAGES OF SPEECH, SUCH AS WE IMAGINE them to have been from the testimony of historical investigation, the phonemic, semantic and morphological elements were agglomerated; that is, they formed a vocal mass that had not yet been split up, by analysis, into the components that we know to-day. It is only late in linguistic history that the word is discovered, and later still that the syllable and the isolated sound are discovered. In speech, it was the sentence that came first.

When a child shapes the sound *Up!* it is not enunciating a part of speech. *Up,* far from being a preposition, is in significance an entire sentence. The mother, lifting it from the ground into her arms, shows that she has understood it as such. According to the content of the circumstances *up* may mean "Lift me into your arms," or "Place me upon this chair," or "Put me into the crib."

Simple and fundamental examples of the word-as-sentence may be seen in the expressions *Yes* and *No.* To call them merely adverbs is a grammatical license; they are no more simple adverbs than the infant's "Up!" is a simple preposition. They are rather a convenient vocal short-hand, so to say: or short-tongue. There are languages that do not possess them, as there are languages that do not possess articles. Latin had

no single word that corresponded to our *yes* or *no*. It had, of course, *sic,* meaning 'thus'; it had *non,* meaning 'not'; these easily could become, as they did in the Romance languages, signs of agreement or disagreement: *si* for 'yes' (Spanish, Italian, Portuguese, and, after a negative, French); *non, no,* for 'no' (Italian, French, Spanish). In the intermediate stages between the Latin and the Romance, there were other forms for expressing agreement or confirmation. Two of the more important French dialects are named after their manner of expressing confirmation: the *langue d'oïl* and the *langue d'oc.* The former signifying "the tongue in which *oïl* means yes") became modern French, in which *oïl* appears, minus the final *l',* as *oui;* the latter ("the tongue in which *oc* means yes") became Provençal. Whence, now, the *oïl* and the *oc?*

One way of implying 'yes' was to answer, *Hoc il(le) est.* This is almost equivalent to our own expression *That's it.* In various regions of France this common people's Latin underwent locally characteristic modifications. Provence changed *hoc* into *oc;* by further economy, the first word of the expression assumed the function and the meaning of the whole sentence. Nearer to Paris a similar condensation occurred, but through a different phonetic process. *Hoc il(le),* or, rather, vulgar Latin *hoc illi,* lost the final *c* of *hoc* and the last syllable of the other word, as they became French. Initial *h,* as happens generally (not always) in the neo-Latin tongues, loses its breath; it becomes, in other words, a silent letter. The result of all these phonetic changes is that there is left only *oïl,* pronounced something like *o-eel.*

The precise nature of the phonetic change is not, for the moment, our concern; let it suffice to notice how, partly through physical causes and partly through psychological (they really constitute a single complex process, which we split, for the sake of analysis, into a pair of seemingly contrasted aspects), a sentence becomes a word. To be more exact: the sentence and the word interchange the outer form of expression; the inner meaning has not varied. In either case the significance is that of a completely conveyed intention, not

that of an isolated word requiring other words to complete the statement.

Yet another tongue named after the word for *yes* is the *lingua di sì,* found in Dante. He referred to his native Tuscan, which became the literary Italian largely through his influence and that of Petrarch and Boccaccio.

"The human mind," writes Vilfredo Pareto in his *Trattato di Sociologia generale,* "is synthetic." Women and the less well-educated among men find analysis too arduous.[1] Pareto's use of the word *synthetic* is, in my opinion, misleading. Synthesis implies a pattern formed after analysis; it is an integration, and integration—making a unity or a unified pattern out of hitherto scrambled material—presupposes a mind capable of coördination. The human mind in its prelinguistic, or very early linguistic, stage, is not, in this sense, synthetic at all; it is even pre-analytic; it has made but the first steps toward a sense of differentiation.

It should not be understood, from the examples that I have given, that primitive language indulged in short sentence-words, much as the conventional Indian with his ever-sounding "Ugh!" When it is said that the sentence preceded the word, the statement does not mean that the primitive sentence was a sort of tabloid expression. It was, on the contrary, from all the evidence that historical linguistic study brings forth, a clumsy, confused, long, massive lump of sound, in which there was no feeling for parts of speech and only the haziest intuitions of grammatical relationships. It was a blur of speech, probably heard as a blur of sound; it was like an image thrown upon a screen out of focus. The evolution of grammar and of word-analysis may be likened to the gradual

[1] See *The Mind and Society* (Harcourt, Brace and Co., 1935), 4 vols. Vol. 1, p. 18, § 30. Even to those who can read the original in Italian, or the translation into French, I recommend the study of the English version by Andrew Bongiorno and Arthur Livingston, made with the advice and active coöperation of James Harvey Robinson. Dr. Livingston's editing—quite apart from one's qualified personal opinion of Pareto's contribution to a quasi-mathematical sociology—is a rare model of what such editing should be; it transforms the English version, indeed, into a document superior not only to the French translation but to the original itself.

bringing of this blur into clear focus upon the screen of the mind.

Our imaginary, but not altogether fantastic, primitive was in the position of one who *could not see the trees for the wood.* Not seeing the wood for the trees is a proverbial expression that could have appeared only very late in civilization, after we had achieved the faculty of sharp differentiation, i. e., analysis. How weak this faculty was in the beginning appears even at the late period when writing itself was already an ancient art. Our Indo-European forebears, like the illiterates of to-day, wrote as they spoke, with no feeling of space between words. Words were run together as if poured like molten metal into a mold. This is as true for certain ancient Greek inscriptions as it is for the more ancient Hindus and their Sanskrit manuscripts. Division of labor, development of specialized function—in other words, the application of analysis to society, comparable to the development of grammar out of language, or the development of harmony out of music—are signs not only of increasing complexity, but of increasing awareness. The true synthesis does not precede these developments; it follows upon them.

As with the early systems of transcribing language, so with those of transcribing music. The individual note, like the word, is a late development. As primitive song consisted of undifferentiated, repeated agglomerations of sound, so the first methods of writing down music were uncertain representations of the melodies. The written symbols stood for tone-groups, and indicated relative ascents and descents. Even when these symbols, called neumes, gave way to a consciousness of the separate notes, the notes were written in what may be described as agglutinated groups; such groups corresponded precisely to writing without spaces between words.

§ 2. RECAPITULATION—PARTS OF SPEECH

We have seen that articulate sound developed out of the confused noises of primitive speech.

Out of the confused intentions of these noises likewise developed meaning.

Articulate sound has not ceased developing since that protohistoric epoch. Neither has meaning ceased to develop.

The science of speech-sounds is called Phonetics; the science of sound-changes is called Phonology.

The science of meaning, in its origins and its changes, is called Semantics.

In the evolution of these sounds and meanings, the direction has always been from chaos, confusion, and disorder to order—from agglomeration to analysis—from unwieldy forms to more manageable forms. Language is, among other things, a tool, and man refines upon all his tools.

Analysis, however, is not enough. Words are parts; they are not, in any deeper linguistic sense, wholes. Analysis, or taking apart, is necessary to understanding; for utility, however, we must be able to synthesize, to put together. A machine works through the coöperation of its intricately organized parts. Organization, indeed, is coöperative synthesis.

We know words—their sounds, their definitions. In order to achieve true meaning, we must be able to put these sounds and their definitions into organic coöperation.

In analyzing the word we distinguish three different aspects. It makes a sound. It has a meaning. And it has a place in the larger series of sounds that we call a sentence.

The smallest sound-unit of a word is called a *phoneme.*

The smallest meaning-unit of a word is called a *semanteme.*

The smallest formal unit of a word—the part of the word that indicates its relationship to other words in the sentence, or that expresses an organic, coöperative relationship—is called a *morpheme.*

A few examples will make these distinctions clear at once. Take the word *going.* The phonemes are the component sounds: *g, o* (that is, phonetically, *o* plus *u*), *i,* and *ng.* Or, *hush.* The phonemes are *h, u* and *sh.* (Observe that the spelling does not count; what counts is the sound that the spelling more or less perfectly represents. In *cough* the phonemes

are the sounds *k, o,* and *f.*) In *going,* the semanteme is *go,* since that is the element containing the root of the meaning. In *going,* again, the morpheme is *ing,* since that is the part of the word indicating its relationship to any other words with which it might be used: a time relationship, in this case, telling us that the time is the present. In *audible,* the semanteme is *aud,* which indicates hearing; the morpheme is *ible,* a suffix that indicates capability or possibility.

From this it would follow that prefixes, suffixes, and infixes—[2] these are grouped under the general term *affixes*—are all morphemes. All verbal endings are morphemes. Not all words have morphemes, since many words require no formal element. *Yes, no*—these have phonemes and semantemes, since every word must have a sound and a meaning. *Books,* in the *s,* has a morpheme, since *s* indicates plurality. If, in addition to its phonemic and semantemic elements, a word has another element, that element is morphemic.

Grammar has to do with the arrangement of sounds and meanings into organic significance. Grammar *organizes* meaning. Grammar deals with structures, with forms. It is thus a morphological study. It deals also with the arrangement of those structures and forms. It is thus a syntactical study. *Morphology* is the science of forms; *Syntax* is the study of arrangements. (From Greek *syn,* 'with,' and *tássein,* 'to put in order'; beside these is the noun *sýntaxis.*)

The etymology of the word *grammar* means little to us, since *gramma,* in Greek, is 'a letter,' akin to the verb *graphein,* 'to write.' Grammar, like all other branches of language, grew from formlessness to form, from partlessness to a feeling for parts. Although the parts of speech, as we know them, are not at all the only parts into which speech may be divided, they do represent a deeper understanding of language. This understanding is assisted by discovering distinctions between

[2] English has no infixes. An infix is an affix that occurs within a word. "In the languages of Mon-khmer the n-infix generally forms instrumental nouns and adjectives. Mon *put* means *to chisel; p-n-ut* means *scissors.*" Willem L. Graff in *Language and Languages* (D. Appleton & Co., 1932), p. 151.

one aspect or function and another. All progress in learning, whatever the subject, is achieved in just this way. We classify in order that we may understand and control.

From the standpoint of classification, then, grammar studies (1) the *forms* of words, as distinguished from their sounds and their definitions; and (2) the *interrelationships* of words, as distinguished from their static aspects. Grammar is dynamic. Words, by their morphemes, indicate just what rôle they are playing in the syntax, in the putting-together, the composition, of the complete meaning.

When you receive a radio set, you find the wires labelled. The wire with the green band, say, is for the ground; the wire with the red band is to be connected with the antenna. The endings of a Latin noun or adjective are such labels, tags, or bands; they indicate that they are to be mentally connected with words having similar endings or tags. They are precisely as structural, in their way, as is the tagged wire of the radio set. If the proper connections are not made in the set, there will be no music; if the proper connections are not made in the sentence, there will be no true meaning.

Grammar has been made into one of the unpleasant mysteries of the school curriculum; mathematics is another. Both these unpleasant conditions, I imagine, have been brought about by insufficient explanation, which may be a euphemism for bad teaching. It is far more difficult to put together a radio set than to put together (and take apart) a sentence. Yet children, in the early days of radio, did the one and acquired an unreasoning terror of the other.

Syntax is a signalling system of interconnections; the morphemes are the interconnections. Sometimes the mere order of the words serves the purpose of morphemes. So, in the case of animals, the bravest may be singled out at once because he leads the pack.

Formerly, when men tried to settle all problems by sitting down and thinking about them abstractly, far from the places where things were happening, it was thought that there was such a thing as a universal grammar. And that universal gram-

mar, of course, was patterned after the classical models. Languages were appraised after their close or remote conformity to this imagined standard. Traces of this attitude remain, but they are vestigial.

There is no universal grammar, any more than there is a single type of radio or other apparatus. Grammar, like all other elements of language, is a practical adaptation by a type of mind to a type of circumstance. Grammar changes and, if modern scholars are right, there seems to be a general direction of change. For this reason, it is incorrect to speak of English grammar, or any other grammar, as if it were a law of nature—just as incorrect as it is to imagine that there is, somewhere behind the clouds, a universal pattern to which all grammar must conform.

Grammar is somewhat more constant than sounds or meanings because an arrangement for sorting and handling material is more constant than the material that it handles and sorts. It changes inevitably, however, just as any other type of sorting apparatus changes, in the direction of greater efficiency. Long experience suggests ways of saving unnecessary motions, doing away with unnecessary parts, combining functions, distributing functions. The lesson of linguistic evolution, indeed, may be that grammar, like machinery, is becoming stream-lined, and for much the same reasons.

It is interesting and instructive to follow various speculations as to the order in which the parts of speech evolved out of pregrammatical language. It should be understood, of course, that there is no language to-day, however seemingly primitive, that is without grammatical organization. Many grammars seem to us clumsy, illogical, even stupid; this is merely a less scientific way of saying that they resemble our own grammar too indefinitely.

It is possible, in many instances, to watch, historically, one part of speech turning into another. This is as true for our own current speech as it is for our speech of the past, or the speech of other nations. When we read, in Fielding, "But me

no buts," or, in Tennyson, "Diamond me no diamonds! prize me no prizes!" or, in Shakespeare, "Grace me no grace, nor uncle me no uncle" or, in Ben Jonson, "O me no O's," [3] we see how easily one part of speech may be made over into the function of another.

But is a preposition or a conjunction. In Fielding's sentence, however, the first use of it transforms it into a verb. *O* is an interjection, but Ben Jonson easily makes it into a verb. *But* itself, originally, was neither preposition nor conjunction; it comes from Anglo-Saxon *būtan,* 'without,' 'on the outside,' 'except,' 'besides,' and is composed of *be* and *utan; utan* is 'outward,' and is in turn derived from *ut,* which is our word *out.* All these Anglo-Saxon words are adverbs. We can see how *but* acquires its general meaning of exclusion—how it acquires a specialized function.

We know that in *I am walking, walking* is a verb; in *walking is a pleasant exercise* it is a noun. Any German infinitive may be transformed into a noun by placing before it the neuter article *das: trinken,* 'to drink'; *das Trinken,* 'drinking.' In German, there are no qualms about using adjectives instead of adverbs in such sentences as *walk slow(ly);* the parts of speech, for such purposes, are interchangeable. They are gradually becoming so in English. In such a transitional (and, at present erroneous) statement as *drive careful,* instead of *drive carefully,* we may consider that *careful* refers not to the verb but to the unexpressed person who is addressed; that is, *be careful* (*as you*) *drive.*

We are not at the moment considering correctness, but the ease with which parts of speech may be made to share or exchange functions.

We have already touched upon Bréal's theory that pronouns were the first part of speech.[4] According to others, adjectives lay claim to that primacy. Nouns are specialized adjectives. Some support for this view would be found in the

[3] See, for a long list of such locutions, Bartlett's *Familiar Quotations,* 11th Edition (Little, Brown and Co., 1937), pp. 946–947.

[4] See page 134.

fact that primitives have any number of words for, say, different kinds of tree long before the word *tree* itself appears, if ever.

§ 3. "CLAIREMENT" AND "CLEARLY"

The process by which an independent word becomes a mere grammatical appendage, or by which a phrase once alive with literal meaning is turned into the equivalent of word-ending, is illustrated in French by the history of the termination *-ment. Ment,* in such words as *clairement* (clearly), *doucement* (sweetly) and *certainement* (certainly) has the force of our *-ly* in their English equivalents. *Ly,* like *-ment,* was once an independent word.

It will be noticed that the rule for the formation of adverbs in *-ment* calls for the feminine form of the adjective upon which the adverb is based. *Clairement* is formed upon *claire,* feminine of *clair; doucement* and *certainement* are formed, respectively, upon *douce,* feminine of *doux,* and *certaine,* feminine of *certain.* This rule is a natural result (really an inheritance) of the manner in which the ending *ment* became part of the French tongue.

The termination *-ment* is derived from Latin *mens, mentis,* meaning 'mind.' *Mens* is a feminine noun. In the ablative case, therefore, the form would be *mente;* if we did something with a clear mind, or a serene mind, or a sound mind, the Latin expression would be in the ablative case, which is the case employed, among other things, for the description of manner. In Latin, as in Greek and in Russian and in so many other languages (although not, of course, in English) adjectives agree with their nouns in number, gender, and case. The phrase 'with a sound mind'—*sana mente,* used in wills—would show the adjective *sanus* in the singular number, feminine gender, and ablative case.

What concerns us at the moment is the gender of this expression, determined by the gender of *mens.* There were so many frames of mind in which an action might be con-

templated or performed that expressions in *mente* were exceedingly commonplace in Latin. So commonplace, indeed, that it could hardly be surprising if the average man and woman, who is interested in speech, not in grammar and derivations, had a tendency to forget that the *mente* element referred only to the mind or spirit in which a deed was regarded or achieved. It came to suggest *manner* of any kind, the kind being described by the preceding adjective.

When these Latin vulgarians (one name for the Latin of the people is Vulgar Latin) wished to express such a concept as *dangerously,* for example, they would use the verbal equivalent of *with a dangerous mind.* Now, such an expression, literally translated or analyzed, makes nonsense. There are dangerous minds, to be sure, but it is not such subversive mentalities that are meant by the Latin equivalent of *dangerously.* What is meant is *in a dangerous manner.*

In just such a way as this did the ending *mente* lose its primary meaning of mind and become generalized into an ending descriptive of manner. The remembrance of the grammatical gender, however, remained in the expression. Because *mens,* in the meaning of mind, was a feminine noun, adverbs in the Romance languages based upon *mente,* the Latin ablative of *mens,* are formed upon the feminine of the adjective. The grammatical custom survived the destruction of the noun.

Strangely, indeed, *-ly,* the ending in English that corresponds to the ending *-ment* in French and in other Romance languages, is derived from an old word for 'body.' Thus in the Latin tongues the word for *mind,* and in the Teutonic tongues the word for *body,* undergo phonetic and semantic alterations through which they lose their respective separate identities and become grammatical, morphological terminations.

In Middle English the ending *-lich,* in Anglo-Saxon the ending *-lic* (with both long *i* and short), go back alike to the noun *līc,* meaning 'body.' In German, the word for 'body'

is *Leiche;* it refers, however, to a dead body; the 'live body' is *Körper,* akin to Latin *corpus.* Akin to *līc,* Anglo-Saxon for 'body,' is our word *like,* indicating resemblance.

Just as the Latin ablative *mente,* in such phrases as *sana mente,* retained its independence, so such phrases as *god-like* clearly mean *like a god, god-resembling.* From such usage to a locution such as *intermittently,* is a long step in language. *Intermittently* cannot mean *intermittent-resembling;* the ending *-ly* here cannot possibly refer to a physical likeness. The *-ly,* once an independent word, has, from the frequency of its use, suggested *manner* quite as naturally as did the Latin ablative *mente.*

Let us now examine two humble English expressions: *hot as hell,* and *hot as blazes.* They may be commonplace, but at least their meaning is unmistakably logical. Blazes are undoubtedly hot. So, by theological definition, is hell. Originally, if we can imagine a time when such expressions were new, there was descriptive, even poetic, virtue to the phrases. Heat, after all, is one of the conditions of life. To keep on saying that a thing is hot, however, is to become monotonous. When the first occasion arrived for a speaker to amplify upon the effect of heat, and he hit upon the comparison of the temperature with the heat of the infernal regions, it was nothing short of an inspiration to invent the phrase *hot as hell. Hot as blazes* is a companion in effectiveness—*blazes* means *hell* as it does in "You go to blazes!"

To-day, however, the phrases are all but emptied of their content. Their fires have indeed been all but extinguished. So little, in fact, does the notion of fire and flame persist, that we have all heard "It's as cold *as blazes* this morning," or, "It's as cold *as hell* outside." The phrases *as hell* and *as blazes* have become, virtually, grammatical terminations, signifying little more than *very* (which originally meant *truly*), or *exceedingly.* What we remember of them, for the purposes of the vernacular, is not the image of heat and its various manifestations, but the notion of excessivity. *As blazes* and *as hell* have become grammatical substitutes for the orthodox

superlative. Instead of *cold, colder, coldest,* or *cold, colder, very cold,* we have *cold, colder, cold as hell,* or *cold as blazes,* and the effect of *as hell,* and *as blazes,* is precisely the effect of *very cold,* only that it is more picturesque.

Thus *as blazes* and *as hell* join the Romance ending *-ment* and the Anglo-Saxon *-līc* as words once alive with independent meaning and now relegated to secondary significance.

The adverb is a relatively recent arrival in language. It is usually an adjective or noun or pronoun in special form. Such Latin adverbs as *primum, rursum* and *ceterum* were originally the accusative cases of adjectives; such adverbs as *crebro, subito, vulgo,* are old ablatives.

Prepositions are regarded as being even newer than adverbs. The article (*a, the*) seems to be the very first part of speech thought of, since it is associated with our earliest induction into language; yet there are languages, dead and alive, that find no need of it. Greek had it, but not Latin; German has it, but not Russian. The article of the Romance languages, as we have seen, developed from the demonstrative pronoun of Latin.

The simple truth, then, seems to be that the parts of speech form a very human, and a not very exact, system. Grammar itself is equally human, and equally inexact. It is subject to the same types of change that affect word-sounds and word-meanings. In a larger sense, indeed, it is part of the evolution of sounds and meanings; it concerns larger structures, that is all.

The shift in parts of speech is not something that happened only to old languages, or to new languages in their earliest stages. It is going on all the time. The automobile signs read either *Go Slow* or *Go Slowly. Slow,* in form, seems to be an adjective; *slowly* seems to be an adverb. Each, in actual use, is adverbial. There is a tendency, in contemporary English, for many adverbs to drop the *-ly,* but to continue their adverbial functions. Is *go slow* bad grammar, or is it a transitional form? If, in such a construction, we understand precisely what is meant, is it necessary to have the *-ly* ending?

Such an expression as *I did it good* instead of *I did it well* sounds barbarous to our ears; is it *inherently* bad, or is it a transitional phase? Can it not mean *I did it (so that it became) good?*

I am not arguing for or against these locutions, at the moment; I am considering them as symptoms of linguistic direction. Grammar was made for language, not for the grammarians. Distinctions are maintained just as long as the spirit of the language feels them to be necessary for the purposes of clarity, force, or æsthetics.

Consider the expression *different than,* or the English *different to.* Careful writers on both sides of the Atlantic use *different from.* Careful writers use *indifferent to.* Why should *different to* be wrong, and *indifferent to* be right? *Different* is coming more and more to be classed mentally (i. e., analogically) with such words as *other, else.* We say *other than,* and hence many say *different than.* It is not at all unlikely that *different than* will become good English. To-day it is still bad, not inherently, but because most people think it so; as soon as they cease thinking so, it will become good—that is, used by those who set the standard for speech and writing.

Adjectives may become nouns by a simple semantic process. The French for 'summer' is *été;* the Spanish is *estío.* These nouns were originally Latin adjectives; 'summer,' in Latin, was *tempus æstivum,* which is quite like our own *summertime;* 'winter' was, in Latin, *tempus hibernum;* 'morning' was *tempus matutinum;* one expression for 'day' was *tempus diurnum;* 'soon' was *tempus tostum.* In all these phrases, then, the noun is *tempus,* which is 'time' or 'weather.' The other words are adjectives, describing the weather or time. *Hibernum* is found in our *hibernate,* to go away for the winter; *æstivum* is associated with our *æstival* (belonging to the summer), with *æstivate,* to spend the summer; *matutinum* is associated with our *matutinal,* referring to the morning; *diurnum* suggests our *diurnal,* or *daily,* which reappears in *journal.*

In the course of phonetic and semantic history, however,

the noun *tempus* came to be understood; the adjective then took its place and became a noun. *Diurnum* is the parent-word of French *jour,* and Italian *giorno.*

As certain adverbial endings were once independent words, so were some verbal endings.

The future of the French, Italian, Spanish, and Portuguese verb is formed unlike that of the Latin, from which these tongues are derived.

In Latin the future of *amare,* 'to love,' is distinguished by the ending *-bo: amo,* 'I love'; *amabo,* 'I shall love.'

The Romance languages evolved their own way of making the future tense. Popular Latin had expressions such as *amare habeo:* that is, 'I have to love,' 'I have loving to do.' From the notion of obligation came the notion of futurity. *Amare habeo* developed into such forms as French *aimerai,* Spanish, *amaré,* Italian *amero,* Portuguese *amerei.* The *amare* and the *habeo* elements coalesced, and the once independent *habeo* became a mere ending.

In Portuguese, however, there is a type of the future that shows the *habeo* element in its transitional stage. The ordinary word for 'I shall learn' is, in that tongue, *aprenderei.* When, however, such an affirmative future has as object a personal or reflexive pronoun, the pronoun is placed *between* the infinitive of the verb and the future ending. 'I shall learn it' becomes *aprendê-lo-ei.* The *ei* represents the phonetic development of the classical Latin *habeo.* Literally translated, this type of Portuguese future (the conditional has a similar type) reads: 'to-learn it I-have.' The ending *ei* is, in this case, a half-independent word, and not, for the moment, a coalesced ending.

It is interesting to recall that the history of the endings *in classical Latin* is little different from that of the endings just referred to.

The imperfect of *amare,* in the first person singular, is *amabam,* 'I loved.' The *-bam* looks like an ending; it is. But it was not always an ending. Once it had an independent

meaning, even as did *habeo* before it became an ending in the Romance tongues. It comes from an Indo-European root meaning 'to become,' 'to grow.' It is almost as if we were to have a form 'I came loving,' or 'I, loving, came,' and the *came* coalesced with the *loving: I loving came,* and then became an ending.

Such coalescence is common, and gives rise to new grammatical forms. Danish for 'they are found' is *de findes.* The *s* is an ending that shows passive form, just as does the *-ur* in Latin *amatur,* 'he is loved.' That *s,* however, was originally the word *sik,* or 'self,' more familiar to us as the *sich* in German. Old Norse shows forms similar to the Danish: *their finna sik* becomes *their finnask.* Such coalescence did not take place in German.

§ 4. SEX AND WORDS

In English, such words as *the* and *an,* and adjectives in general, do not indicate, by their form, the gender of the words to which they refer. Many other languages still feel the need of such indication. Adjectives must *agree* with their nouns in gender, as well as in number and case; such agreement is called concordance. Why gender for words in the first place?

The existence of gender in language has been attributed in part to the magical or animistic element in primitive life. That we should distinguish, to-day, between male and female in brute and human being is normal. Difference between the sexes is a vital factor in living; it is almost one of the definitions of living. Why, on the other hand, do we call a boat a *she?* Why is a table, in French, feminine (*la table*)*?* Why is a rock masculine (*le rocher*)*?* Why, in German, is a child neuter (*das Kind*)*?*

There can be little doubt that the primitive mind was animistic—that is, that it endowed its surroundings with its own attributes. All nature, therefore, stirred with life, because man did. A special form of this psychological peculiarity is anthropomorphism—from Greek *ánthropos,* 'man,' and

morphé, 'form': in other words, regarding the universe as if it were formed like man, and interpreting it as if it were, indeed, another form of man.

In this way, since in social life there were males and females, in the life around man all objects and qualities and natural phenomena would be regarded as possessing sex.

The explanation, at first, appears to be a laborious statement of the obvious. It seems all but self-evident. Yet, if it were really so simple, why is the German child neuter? Why is woman herself, as *das Weib* (our word *wife*), neuter? Why, in French, is a sentinel, a male military guard, feminine (*la sentinelle*)?

It is not unreasonable to believe that the sexual division of life suggested natural gender in language. It is not unreasonable to believe that such primitive traits as animism and anthropomorphism suggested the sexual classification of what to us are inanimate objects, impersonal qualities and imponderable abstractions.

How, then, did such contradictions as *das Weib, das Kind, la sentinelle* arise? In other words, if our ancestors attributed sex to natural objects, how did they manage, dealing with human objects, to attribute to them unnatural sex, or even neutrality? Why, indeed, a neuter gender?

It is too early to answer all these questions at once. It is useful to remember, however, that once a classification has been established it may work in a more or less mechanical, automatic manner. Sometimes the obvious sex denoted by a word will triumph over its grammatical form; at other times the grammatical form will force it into a category into which, sexually, it does not belong.

For example, the Latin word *poeta* means 'poet,' a male *poet*. The *a* ending is usually the sign of a feminine noun. Yet, although *poeta* is declined like a feminine noun, the adjective describing it must appear in the masculine form. *Poeta bona,* to describe a good male poet, is wrong; the proper form is *poeta bonus*. Here, despite the grammatical form, the actual sex asserts itself.

Consider such words as the French *épousailles* or *funerailles*. Each is a feminine plural; the first stands for 'espousals,' 'wedding'; the second, for 'obsequies,' 'funeral.' They are derived, respectively, from the Latin *sponsalia* and *funeralia*. The Latin words are *neuter plural adjectives;* in French they have become *feminine plural nouns*. What is important at the moment is not the phonetic process by which the change took place, but the shift in grammatical classification. The combination *lle* suggests a feminine ending in French: *la fille,* 'the girl'; *la ville,* 'the city.' When phonetic development produced *épousaille* from Latin *sponsalia,* the outward form of the ending *aille* suggested, by analogy, a feminine form, and the word was carried, along with similar words, into the feminine category. The realization that the word was a plural accounts for the addition of the *s,* which, in French as in English, is one of the signs of the plural number.

Many words that were Latin neuter plurals have become, in French, through just this accident of phonetics, feminine in gender and frequently singular in number. In language, gender begins as sex; it ends as a grammatical classification that ignores biology and the protestations of reason. For grammar has a "magic" of its own.

The tendency to personify inanimate objects remains none the less in the contemporary psychology. If we still call boats and automobiles *she,* and frequently, as in the excitement of a race, do so without a sense of incongruity, we may well believe that the primitive beheld females in stones, males in brooks, and sex in everything.

§ 5. CORRECTNESS AND VITALITY—IT'S ME, (OR AIN'T IT?)—WHO'S WHOM?

The idea of correctness in grammar, as, for that matter, in all other departments of language, too easily becomes a pattern making for rigidity.

To resist such an idea and such a pattern is not, *ipso facto,* to favor anarchy in grammar, any more than to resist mere

correctness in social deportment is to favor a half-anarchical boorishness. There is too much, nevertheless, in conventional grammar, of the spirit that in social intercourse results in a more or less sterile formality, a superficial etiquette that has little fundamental relation to the realities of social intercourse.

Naturally, we desire to speak and to write with a regard for certain conventions of the process. If we are to understand one another, we must have a flexible code of communication. The so-called rules of grammar are an important part of that code. It is wrong, however, and in the long run contrary to the best interests of grammar and of social communication, to regard these so-called rules as articles of an unquestionable legislation, not subject to repeal or change.

Many grammatical rules are but a point in time. That is to say, they were not rules yesterday, nor will they be rules to-morrow. To this it may be answered, "Yes, but we speak to-day, and are not concerned with yesterday or to-morow." This is a short-sighted view. Even as we speak, yesterday becomes part of to-day, and to-day becomes part of to-morrow. The language we speak is a fluid phenomenon, and if we allow it to become rigid, it has a way of holding us bound to the past. Change for the sake of change is neurotic; but equally so is resistance to change for the sake of maintaining, in language, the *status quo*.

Which *status quo?* Usually we share the prejudice of our time. We—so say we wordlessly, with the implications of our attitudes and our acts—are that moment toward which the rest of history has been pointing. This is not a fault of language-study alone; it is a sin of human psychology. Language, we must keep in mind, has no laws of its own; it simply reveals, in the province of speech, laws that characterize all human activity.

Language calls for the maintenance of a delicate equilibrium between the old, the obsolescent, and the new. It is not, it cannot be, static. It is never twice the same, any more than was the famous river of Heraclitus. Grammar, like all

the other aspects of language, is forever undergoing minute changes that, at a certain historic moment, make us all at once aware of a distinct difference between the language that we learned as children and the language that we pass on, in turn, to our own children.

Correctness in grammar lends itself too easily to misunderstanding. It suggests legislators, judges, and criminals. Especially to the young student it is made to appear as a syllabus of speech, with all the austerity and immovability of axioms in geometry.

One mode of expression is taught as being "right"; the other is "wrong." That, in too literal a sense, settles it. Effective speech is made to lose almost entirely its deep powers of special adaptation to special purpose. Grammar becomes the lifeless application of inflexible patterns. Language, especially to students in their formative years, is presented as a list of rules and regulations to be committed to memory and to be resented, appreciably, as a fetter upon naturalness in speech.

What is the result? The fundamental rules of English grammar are relatively few, simple, and logical. Yet the country is densely populated with graduates of high schools and even colleges who subscribe to agencies that promise, for a small fee, to teach them how to avoid the common mistakes of daily conversation. Just as certain careless semanticists seem to believe that there are "bad" words and "good" words, and that by using only the "good" words we shall all make ourselves more clear, so certain careless grammarians seem to believe that there are "bad" constructions and "good" ones, and that the problem of language is to use only the "good" ones.

These are dangerous half-truths. Words do not exist by themselves; neither do grammatical constructions. They, too, are part of a context. The purpose of speech is not to achieve "correctness," it is to achieve vital transmission of sense, meaning, intention. Such sense, such meaning, such intention, are the very life of speech. Correctness at best—and it has a place—is one of the numerous means by which language seeks to ensure transmission that shall be as nearly complete as pos-

sible. The place of correctness, then, is as a means that is constantly changing, even as are all the other means. Correctness in language, whether we refer to the definition of a word, to the conjugation of a verb, to the specific use of a preposition, or to a grammatical "rule," is a more or less passing phase of the language, just as are the words themselves.

The language changes even while the purists argue for the permanence of their favored forms. Justifying one manner of speech or condemning another is, or should be, really a historic, a sociological, a psychological discussion. Behind the notion of "correctness," of obedience to grammatical law, lies a fallacy. It is the fallacy of what passes for academicism—adherence to a set of rules that has been allowed to crystallize, to impede the flow of thought and action, to render stagnant the waters of linguistic adaptation.

To be "correct" is to assume that one has discovered, whether outside or within, an ultimate set of rules for language or for life. It is, in a word, as here employed, to halt the process of adaptation—to attempt to fix, at one moment of linguistic life—the life of expression. *Eppur si muove*—"nevertheless, it does move!"—is true of language no less than of the earth.

It would seem that the argument against *It's me* were final and irrefutable. *Me* is in the objective case; *is* is the so-called copulative verb, the coupling agent that links identities. The verb *to be,* in its finite parts, takes the nominative case. Whatever *is,* then, must appear in the case of the subject. Latin, for example, would never permit such a heinous expression as *Me sum.* It would have to be, if at all, *Ego sum.* 'I am,' in question form, would have to be *Am I?* No one, in his right grammatical senses, would think of saying *Me am,* or *Am me?*

Yet the equally final and irrefutable fact is that people, and persons of culture among them, colloquially say *It's me.* There must be a reason that transcends the narrow logic of grammar, without on that account flouting either grammar or logic altogether. Let us examine the phrase from a number of different points of view.

First, as to sound: *It's I,* or *It is I* lacks, to many ears, a certain physical completeness. *I* seems a weak sound with which to end a phrase, especially when it is used, as in the disputed phrase it *is* used, for the purpose of emphasis. Had it retained one of its earlier forms, either as the German *ich* or the Anglo-Saxon *ic,* it might have retained also, in this phrase, its grammatical rights as the subject. The German says *Das bin ich,* or *Ich bin es.* In Chaucer we find *It am I,* which is almost a literal translation of the German.

Had we retained the first person of the verb, the *I* might have been saved for logic and for grammar. To say *It am me* would have sounded barbarous, or like a Negro affectation. Observe how, in the version *It is me,* the change in the verb introduces a subtle change in the expression. *It am I,* the Chaucerian form, is frankly an inversion of *I am it,* or, as the Germans say, *Ich bin es. It is me* is a straight declarative sentence. It seems to ask for an acoustical climax, as it were; for the purpose of such a climax, *I* is, as sound alone, somewhat weak.

We have seen that such a Latin phrase as *Me sum* would look and sound barbarous. So would *me est,* for 'It is I.' Yet the French expression, *C'est moi,* is the direct descendant of what *me est* would have led to, had it ever been employed. The French say *suis-je?* (am I?) in questions, but never use the phrase by itself. Preferably, even in such questions, they use *Est-ce-que je suis,* literally 'Is it that I am?' The longer phrase owes its origin to the psychological need for more physical sound. *Suis-je* is too soon off the tongue; it lacks complete consonants; it lacks body; outside of poetry or poetic diction, forms such as this do not sound so substantial as the mind feels they should sound. Hence the *est-ce-que* combination, which serves as a sort of psychological prefix—a question-mark in verbal form—a phonetic reinforcement of a phrase-type otherwise frail.

The French, for 'It is I,' say *C'est moi.* This is the exact linguistic *and psychological* equivalent of *It is me.* To say *C'est je* would give emphasis to a word (*je,* 'I') that in spoken

French is the weakest of syllables. The Frenchman, then, says *C'est moi* for the same reason that more and more English speakers are coming to say, especially in conversation, *It's me*. The phonetic reinforcement of *moi* and *me* lends strength to a statement otherwise weak in its assertive intention.

So much for the phrase as sound; that is, if it is really possible to make a neat division between sound and sense in such expressions. Consider it now in its more patently psychologic aspect. The speaker of English is accustomed to hear and see his subjects at the beginning of the phrase and his objects at or toward the end. This is true, though less so, of French construction. It is a peculiarity of word-order that is not true of Latin or of Greek. I dare say that the average Englishman, uninfluenced by training in Latin or Greek, feels an uncomfortable sense of inversion, or semi-inversion, upon beholding the printed phrase *It is I*. It sounds stiff; it looks stiff; indeed it is, in conversation, generally formal, stiff, self-conscious. The truth is that, for a number of reasons, the word *I* does not look in natural position at the end of a sentence. Nor, for a Frenchman, does the word *je*. Englishman and Frenchman alike, in such a circumstance as this, feel the need of the objective case. So, to the feeling that phonetic reinforcement is necessary is joined the feeling that the objective case is called for. Hence, again, *It is me* and *C'est moi*.

More and more, then, our expression *It's me* is becoming the accepted form for colloquial usage. To hear *It is I* in ordinary conversation produces, upon a growing number of listeners, the effect that would be produced if a certain beautiful Negro spiritual were to be sung

It's I, it's I, it's I, O Lord,
Standing in the need of prayer.

A singer singing it thus would stand in the need of prayer, indeed; as much in need as if he were to turn the *ain't* of the lines that follow immediately into *is not*. The growing acceptance of *It's me* represents a triumph of psychology over logic; it is a recurrent story in the history of speech. Against

the use of *I* nothing is to be said—nothing logical, that is. The Spaniard finds no need of replacing the nominative case; he says, *Soy yo*. The Italian is comfortable with his *Son io*. It may be pointed out that *yo* and *io* are stronger phonetically than *je* and *I*. Even if they were not, however, we must remember that the Englishman and the Frenchman speak not only with a logic that has its resemblances to the logic of Spanish and Italian, but with a psychological background that has special reference to the materialities of their respective languages.

It is worth while lingering, for a moment, over the influence of the linguistic structure upon expression. It is not safe to draw, from the forms of a language, hasty inferences as to the mentality of those who speak it. Following the methods that some investigators have employed, it would be possible to say, glibly, that the French and the English are illogical peoples, since they accept such phrases as *It's me* and *C'est moi*. We have seen, however, that these expressions are the resultant, so to speak, of a number of linguistic forces—that they originate partly in the physics of speech, since, if *I* and *je* hadn't been such weak words they would have retained their position at the end of their respective phrases. There is more to mentality than a strict adherence to logic. And certainly, in language, there is more than such a strict adherence.

Too much of the so-called logic of language—and how well we see this in the history and the practice of grammar—is verbal. Psychology, too, has its logic, which frequently overrides the narrower logic of grammar in the service of a greater linguistic efficiency. The conflict between regular and irregular forms in language is but one aspect of the eternal conflict between logic and psychology. Sometimes logic wins; the verb, let us say, adopts regular forms in its conjugation. Sometimes psychology wins, and the irregularity persists because it has become deeply established. The truth of the matter is that in language the logic-psychology conflict is not so much a conflict as a wavering equilibration between the two.

Let us return to the *ain't* of the Negro folk-song, that followed so quickly and so naturally upon the *It's me.* For *ain't* shares with *It's me* the unjust censure of the hyper-grammatical.

In the objection to *It's me* and *ain't* are heard, of course, the overtones of social superiority. The locutions are so frequently encountered among the less privileged classes that they have taken on a certain plebeian ring. The common grammatical-logical objection to *ain't,* however, is based upon the supposition that *ain't* is a contraction of *is not,* and that it is therefore wrong to say *I ain't,* or *Ain't I?* Before going into the etymology of the contraction, let me say, for myself, that there is nothing more irritating than that evasion *Aren't I?* For this there appears to be no valid excuse. It is not logical: to replace one error—if *ain't* be an error—with another is futile. *Aren't I* is a social affectation, worse than *ain't I* could possibly be, for the latter expression at least keeps its verb in the singular, if (as is said) in the third person. *Aren't I* links a plural verb with a singular pronoun and thus causes a distinct grammatical shock. There is a certain element of snobbish imitation in the adoption of the phrase; for it clearly originated among the upper classes, and to mimic it is to effect at least verbal entrée into that social region, just as to use *ain't,* in the eyes and ears of the same persons, is to slip back into the linguistic slums.

It may be asked, at this point, Why is it, in such expressions as *Aren't I?* or *Ain't I?* that the *I* hasn't become *me,* as it did in *It's me?* One answer would be that language is not unfailingly logical; an even better one, to be used in conjunction with the first, is that the *I* in *Ain't I?* or *Aren't I?* is not used emphatically. In *It's me,* the identity of the speaker is the all-important element of the locution. In the other phrases the important element is the perfunctory negation, which calls for an answer in the affirmative. *I am beautiful. Am I not?* The *Am I not?* is spoken, not to elicit the answer, "Yes, it is *you* who are beautiful," but to bring forth the reply, "Yes, you *are.*"

According to the dictionary, *ain't* is used as a contraction for *are not, is not, am not* and even *has not* and *have not.* The Oxford dictionary lists *ain't* as short for *are not;* also cockney for *am not, is not. Ain't* is another contraction for *are not.* In this country we often hear, "He ain't got a chance," or "They ain't got a chance," in which *ain't* stands for *has not* and *have not,* respectively. It is interesting, in connection with the cockney usage, to indicate that *ain't,* for *am not* and *is not,* is common Negro usage, too, thus proving, for the hundredth time, that many so-called Negroisms are not original with the Negro, but have been taken over by him from the speech of the English settlers of America.

The case of *ain't* is not quite so good as that of *It's me.* It is more noticeably restricted to unrefined usage, or to usage in one's less careful, less formal, moments. Technically speaking, such a phrase as "We ain't going" is correct; *ain't* is a contraction of *are not.* "They ain't going" is equally correct, as is "you ain't going." From these instances it would appear that the contracted negative spread to the other persons. *Ain't* became a sort of generalized verbal negative, usable in all the persons.

Can it truly be said that the use of *ain't* is diminishing? Not in ordinary conversation, to judge by one's ears. Its negative force, indeed, sometimes tends to become adverbial, as in the humorous Negro question, "Is you *is,* or is you *ain't?*" That is to say, "Are you, or aren't you?" Here, the *is* has the adverbial force of Yes, and the *ain't* has the force of No. The question is, to be sure, frankly humorous; but it reveals none the less a linguistic process. Mencken, discussing Germanisms in the United States,[5] quotes W. H. Allen: "Questions frequently contain an *ain't:* 'You will do that, *ain't* you will?' 'You won't do that, *ain't* you won't?' " This is sober conversation, without the humorous intent of the Negro question quoted above. It shows again the adverbial force of the con-

[5] H. L. Mencken, *The American Language* (Alfred A. Knopf, 1936), Fourth Edition, p. 160.

traction. In *ain't you won't?* we have a double negative of sorts.

In the controversy over double negatives we encounter yet again the familiar, the unceasing, the perhaps eternal conflict between logic and psychology, between correctness and vitality. That double negatives were once good English is known to all who have any linguistic curiosity. That many foreign languages consider them orthodox grammatical procedures is equally familiar to all who have progressed as far as high-school French.

It is not only the illiterate who says *Never no more.* It is Shakespeare. It is not only the vulgarian who says *I ain't got nothin'.* It is conventional French: *Je n'ai rien.* That word *rien* is, in origin, as positive as a word could be; it is derived from Latin *rem,* accusative of *res,* meaning a *thing,* and therefore the opposite of that *nothing* which it has come to mean in negative combination. "I do not have a thing" easily becomes "I have nothing," and the word for *thing* becomes in force, then in fact, *nothing.* In French, in much the same way, *personne* ('person,' Latin *persona*) has come to mean, even without the negative, *nobody. "Je ne vois personne"* may be translated either "I do not see a person," or, "I see no person." This is equivalent to "I see nobody," in which *personne* acquires the negative meaning. From such constant usage with *ne* it actually comes to mean nobody, so that in the sentence *"Personne n'y est,"* it actually signifies "Nobody is there," and in answer to such a question as "Is anybody there," it may be used absolutely, in reply: *"Personne,"* that is, Nobody. In the same way *"Rien,"* which meant originally a thing, may be used in reply, by itself, to mean nothing.

The Spanish negative *nada,* meaning 'nothing,' acquired its negative force in much the same way as did the French *rien.* The complete Latin phrase from which it is derived was *res nata,* or 'anything born'; anything, therefore, in existence. The French, for their negative, kept the *res* element: the accusative *rem.* The Spanish, for their negative, kept the

nata element, with the characteristic voicing of *t* to *d* between vowels. It is as if we were to say, "I haven't a *living* thing," and then, for the sake of economy, reduce it to "I haven't a *living,*" instead of "I haven't a thing." The Spanish *No tengo nada* originally meant just that: *No tengo,* 'I have not'; *nada,* 'a living (thing).'

The original force of such an expression as "Never no more" may have been reduplicative; that is, *never, no more,* with a comma, or the feeling of a comma, between the negatives. The German for 'never' is *niemals;* Yiddish, which is essentially a dialect of Middle High German, for 'never' says *kein mol nit* (that is *kein Mal nicht:* 'no time not'). What shall we say, however, of triple negatives? I find, in the Prologue to *The Canterbury Tales,* such lines as

He never *yet* no *villainie* ne [i.e., not] *said.*

and

There n'*as* (i. e., *there was not*) no *man* no *where so virtuous.*

It is only in formal logic that two negatives make an affirmative, or that three negatives return us to the original negative. In language, the force of the repeated negative may go toward the strengthening, not the cancellation, of the negative idea. The double negative (since we may leave the triple negative safely with Chaucer) is no more ungrammatical, considered from the psychological point of view, than are such *double positives* as "Yes, yes," or "Yes, indeed," or the French "Oui, oui," the Spanish "Sí, sí," and the Russian, "Da, da." In each case we have to deal with *linguistic reinforcement.* In each case we have to deal with an overflow of linguistic vitality.

In the case of the double and the triple negatives there is also what may be called a psychological irradiation [6] of the general idea: the negativity spreads through the essential parts of the sentence. This is but another way of saying that formal grammar yields to psychological insistence.

[6] Thus I heard, early in 1938, a prominent radio columnist, inveighing against war, declaim, "And God *forbid* that it should *never* come!"

The case of *Who did you give it to?* (instead of *whom*) is analogous to the controversy between *it's I* and *it's me.* As one of the influences tending to change *I* to *me* was the feeling that the final position is that of the objective case, so one of the influences tending to change *whom* to *who* is the feeling that initial position belongs in English to the case of the subject. *Who went? Who saw him? Who did he see?* This is the power of analogy working upon pronoun-endings, just as it works upon verb-endings. It is by no means the only force working toward the gradual elimination of *whom* as an initial form.

This point of view, while not exactly conservative, is by no means new. Speaking of Noah Webster, his latest biographer, Harry R. Warfel, writes, "He agreed with Joseph Priestley, an innovator in grammar as well as religion and science, that *It is me* and *Who is she married to?* though not strictly grammatical, should be admitted as anomalous forms because of their prevalence." [7]

Ultimately, the controversy will be settled by the speakers of the language rather than by its legislators. And it will be settled in accordance with the spirit, the diathesis. the predisposition, of the language. Such a predisposition Mr. Sapir calls *drift,* which comes from *drive.* As we all have, personally, certain predispositions, so does each language have a certain tendency. Certain expressions may be perfect grammatically, yet not be *idiomatic*—that is, in harmony with the spirit of a particular tongue. Correctness never made a good, and certainly not a great, writer. It is not to be looked down upon in principle, surely; but just as surely, in the interests of vitality, it is to be transcended.

Such comments as these should not be allowed to sound or read like mere wilfulness or exhibitionism on the part of the commentator. Undoubtedly, if some extra-loquacious monkey had, in eons past, arisen to tell his fellows that some day their

[7] H. R. Warfel, *Noah Webster, Schoolmaster to America* (The Macmillan Co., 1936), p. 83.

descendants, direct or collateral, would walk tailless on two legs, he would have been decried as a vain, too speculative, subversive simian.

An English Doctor of Letters, J. Y. T. Greig, in a dynamitic monograph entitled *Breaking Priscian's Head, or English as She Will Be Spoke and Wrote,*[8] calls for a liberation of English that makes the carelessness of Americanisms sound almost Johnsonian by comparison. Is it that he does not love his native tongue, or that he desires to free it from the stagnancy that besets consecrated linguistic forms?

When purists quarrel with linguistic libertarians, is it fundamentally a matter of language or of temperament? Is there concealed in these controversies an allegiance to social conventions, to class standards? Is it possible, as has been suggested, that the purist in vocabulary, in grammar, in idiom, hates to surrender a hard-won superiority to the man-in-the-street? Language must change. Perhaps the quarrel is really over the relative speed of the change.

What is there to do? Language, in this respect, remains an art. One speaks, one writes, as one finds it best to write and speak. And one tries not to condemn those who differ as vulgarians, anarchists, or mossbacks, whichever the case may be.

§ 6. TOWARD A NEW GRAMMAR

Grammar, which from one aspect is a logic of language, from another may be looked upon as a geometry of thought. It is, in other words, an abstract science, and it is not only childhood that takes unkindly to abstraction. How many adults, speaking now for all the languages of the world, possess anything like a thorough grammatical knowledge of the speech they use? There are reasons for believing, in fact, that we are only now upon the threshold of a true science of grammar. As a result, much of our terminology will have to

[8] Priscian was a Latin grammarian who lived at the beginning of the sixth century. His *Institutiones Grammaticae* comprise the fullest systematic Latin grammar that we have.

be either changed or redefined, and not a little of our thinking will have to be redirected.

This, for the average person, is not so important as a deeper appreciation of words in themselves. Yet it has a direct bearing upon instruction in the schools. It is difficult to understand, without special study, how much the English grammar over which we struggle in our prentice days has been influenced—in truth, corrupted and made needlessly mystifying—by such alien speech-types as Latin and Greek. We are taught *cases* that really do not exist in English. Max Müller, speaking in one of his lectures of the English child's earliest attempts to construct sentences, says that the child speaks Chinese in English. That is, with English words he follows a construction more like the monosyllabic, loose-jointed Chinese. So, too, it might be said that we are taught English grammar largely in Greek and Latin.

The reason, of course, is historical; our earliest grammarians had been reared in Hebrew, Greek, and Latin, and naturally transferred to the study of their own languages the apparatus of the older tongues. No other cause was behind the complex terminology of that strange elucubration christened *The English Grammar, made by Ben Jonson, for the benefit of all strangers, out of his observation of the English language, now spoken and in use.* Jonson's book, printed in 1640, three years after his death, was a first draft; the completed form was destroyed by fire, around 1629. The poet, as Professor Roland G. Kent points out in his *Language and Philology,* had so little depended upon his own observation that he took over, often unchanged, the method of the Latin grammars in vogue. He thus found four conjugations in English; he discovered no fewer than six genders[!] of nouns, and spoke of two *declensions.* We still suffer a less virulent form of this disease, three centuries later.

About this time France, too, had begun to succumb to the same Græco-Latin germ. Latin, as the universal language of European theology and scholarship, would naturally affect a wide area; French, moreover, being one of the languages of

Latin parentage, would the more readily take over the traits of the ancestral grammar. "French grammar," writes the noted Parisian philologist J. Vendryès, "was built up in the Seventeenth and Eighteenth Centuries on the model of ancient Greek and Latin—and it has remained warped ever since. We [that is, the French] still make use of a nomenclature which does not square with the facts, and gives an inaccurate idea of the grammatical structure of the language. Had the principles governing French grammar been established by any but Aristotelians, it would assuredly have been very different from what it is." [9]

The point is not an idle piece of pedantry. Just as English children spend many weary hours over unnecessary complications of spelling, so do they devote to the confusing niceties of grammar an amount of time unconscionably extended because of inadequate method. If language, as Talleyrand declared, is a means of concealing thought (he was a diplomat, and must have done his share to make it opaque) modern grammar has done its part in adding to the frustration.

The plaint is heard on all sides. Richard Grant White, writing some seventy years ago, out of a deep love of the English language that sometimes took on puristic, precisionary phases, cried out:

"Chaucer and Wycliffe had written, but in English grammar schools no man thought of teaching English. When, at last, it dawned upon the pedagogues that English was a language, or rather, in their significant phrase, a vulgar tongue, and they set themselves to giving rules for the art of writing and speaking it correctly, they attempted to form these rules upon the models furnished by the Latin language. And what wonder? for those were the only rules they knew. But the construction of the English language was even less like that of the Latin than English words were like Latin words. From this heterogeneous union sprang that hybrid monster known as English grammar, before whose fruitless loins we have

[9] J. Vendryès, *Language: A Linguistic Introduction to History,* translated by Paul Radin, Ph.D. (Alfred A. Knopf, 1925), p. 91.

sacrificed, for nearly three hundred years, our children and the strangers within our gates . . . how preposterous, how impossible, for us to measure our English corn in Latin bushels! . . ." [10]

[10] See R. G. White, *Words and Their Uses* (Houghton, Mifflin Co., 1872), essay on "Grammar, English and Latin."

CHAPTER XVII

SOME PROBLEMS OF STYLE

A man's style is his mind's voice. EMERSON.

§ 1. LANGUAGE AND ÆSTHETICS

A DIM MEMORY OUT OF HIGH-SCHOOL DAYS SEEMS TO ECHO the distinction that grammar was a question of right or wrong, whereas rhetoric was a question of bad, good, better, or best. Grammar, in other words, was a matter of rule and prescription. Rhetoric and style were matters of choice, of taste. For school-children this may be a helpful way of putting it. It goes no deeper than some such pragmatic basis. Right and wrong, in grammar, and in any other branch of language, for that matter, are misleading terms. "Accepted" and "rejected" would be better; still better would be "standardized" and "not standardized." The rules of grammar are much like the rules of music; they exist rather in books than in the mouths and the minds of people. They are to the architecture of language what the scaffolding of a structure is to the structure itself when completed.

Grammar itself, then, is appreciably an æsthetic function, involving, like rhetoric and style, principles of choice. Different languages have different grammars because different peoples have different ways of looking at and organizing the world about them. If we say 'I see you,' and the French say *Je te vois* (I you see); if we say 'before I have my money' and the Germans say *bevor ich mein Geld habe* (before I my money have), we are not obeying rules, nor are the French and the Germans obeying rules. The rules simply codify what has taken place long before rules were thought of. Grammar no more establishes rules than dictionaries establish meanings.

Both the grammar and the dictionary are originally registers of usage.

We have learned the courage to question dictionaries, on occasion; we may learn a like courage in questioning grammars. Languages proceed along their courses unmindful of text-books, dictionaries, and academies.

Grammar, of course, is closer to utility than is style; for that reason, the element of personal choice is not so great as in the rhetorical phase of language. It is more important—at least, it is more necessary—to speak clearly than it is to speak beautifully. Yet if, as mathematicians have assured us, even mathematics has its æsthetic element, certainly grammar may possess it. And, to change our point of view, it is possible to consider that beauty is but a higher form of utility. In other words, the line between utility and beauty in language is no thicker than the line between beauty and utility in other human activities.

When we discover that Latin, in writing such phrases as 'with the highest praise,' prefers *summa cum laude* (highest with praise) to the literal *cum summa laude,* we feel that the Latins had a delicate sense of balance. Here, surely, is an æsthetic preoccupation of language. There could have been no possible misunderstanding of *cum summa laude;* it simply struck the Latin ear as somewhat end-heavy. By placing *cum* (with) in the middle, a verbal balance was achieved. Observe, however, that this æsthetic feeling has a distinctly physical foundation. It is the verbal mirror of a man holding equal weights in each hand.

This image appears in such expressions as *on the one hand,* and *on the other.* . . . If we had not, in the first place, held objects *in* one hand and *in* the other, the contrasting phrases could hardly have occurred to us. When we are *pensive,* we are *weighing.* (Latin, *pendere, pensare,* 'to weigh.') *Pansies* are "for thoughts" because they are simply the plural of the French *pensée,* which means 'thought.' When we *deliberate,* we also weigh. (Latin *de,* plus *librare,* 'to weigh.') To *librate* is to *balance.* (Latin *libra,* 'scales.') When we appreciate the

balance of *summa cum laude* we feel the *equilibration,* the *equipoise,* the *equilibrium,* of the verbal weight. The æsthetic pleasure of the phrase has a physical foundation. Should this, after all, be so surprising? Æsthetics is a more subtle physicality. We take pleasure in the subtleties of linguistic balance because balance is inherent in the imperfect symmetry of our bodily structure. Walking, for example, is a dynamic balance, a bodily equilibrium.

Consider, again, the matter of relative phrasal length in writing. Writing is symbolized speaking. In speaking, the relative length of our phrases is determined by their emotional or intellectual content and—more than we realize—by the normal flow of our breathing. We do not, in reading, like an uninterrupted succession of sentences containing two or three words each; we do not like an uninterrupted succession of sentences each containing ninety words. We instinctively ask for variation in sentence-length; we instinctively ask, indeed, for variation in word-length, for variation in accent and pitch—in a word, for equilibrium, for harmonious, dynamic balance.

We dislike the succession of short sentences because they suggest asthmatic utterance; we dislike the succession of long ones because they suggest a different type of breathlessness, caused by talking without pause. Listening to music or singing that is consistently in the high registers induces a feeling of strain, and that feeling may begin in our throats, which unconsciously imitate, or have suggested to them, the vocalism required to produce such high tones. Such refinements of writing as rhythm, cadence, harmony of vowels and consonants, even choice of words, which constitute the æsthetics of rhetoric, of style, have a physical basis.

"Kant," wrote DeQuincey in his essay on *Language,* "was a great man, but he was obtuse and deaf as an antediluvian boulder with regard to language and its capacities. He has sentences which have been measured by a carpenter, and some of them run two feet by six inches. Now, a sentence with that enormous span is fit only for the use of a megatherium or a

pre-Adamite. Parts so remote as the beginning and end of such a sentence can have no sensible relation to each other; not so much as regards their logic, but none at all as regards their more *sensuous* qualities—*rhythmus,* for instance, or the continuity of metaphor."

Abstract words, as we learned many chapters ago, are built upon words for concrete experience. Æsthetic effects, which are really abstractions of the body, are built no less upon the concrete experiences of the body. What, etymologically, is one's style? It is one's *stilus,* one's instrument for writing. As man may wield a trenchant *pen,* so he may employ a powerful *style.*[1] From meaning distinction in verbal expression, the word naturally came to mean any expressive distinction, including distinctiveness of dress.

Buffon, in a speech delivered at his reception into the French Academy, declared that the style is the man; *le style est l'homme même.* Fashion decrees that the style is the woman. Between these two conceptions of style many writers have often fallen. Style in writing has too frequently been considered a sort of language-dress that may be put on or taken off at will—an outer linguistic garb. The development of a style thus becomes little more than the acquisition of a verbal wardrobe. Thus Pope:

> *Expression is the dress of thought, and still*
> *Appears more decent as more suitable.*

And Lord Chesterton: "Style is the dress of thoughts." It would have been better if Buffon's dictum had been translated more exactly: *style is the man himself.* It is not a mannequin upon which to drape words, but a man; not a mannerism, but a man; not an integument, but the evidence of an inner structure, a living organism. It is not only the man (i. e., the speaker or writer); it is also the hearer, the reader. One man's meat may be another man's poison; one man's style may be another man's verbal poison.

[1] *Style* is derived from Latin *stilus,* and should properly be spelled *stile.* The *y* for the *i* appears because of a supposed connection of *style* with Greek *stulos,* 'a pillar.' That is why the instrument is spelled *stylus* in English.

Now, there is no universal grammar; there are only grammars of this language and that. So there is no universal style; there are only styles of this writer and that. As there are national types, as there are personal types, so certain grammars and certain styles will have in common certain characteristics. This has its significance, of course, but the common structure of man and animal alike does not interfere with the development of intensive and extensive differences between animal and animal, and between man and man.

It has been said that a language is to the people speaking it as style is to the man himself. Language is the style of a people. In other words, the type and traits of a particular tongue reveal something about the nation that speaks it, as the style of an author reveals much about himself as an individual. This must be generally true, however much the notion has lent itself to fanciful application.

The language, however, is social; true style is individual. Style represents, often, the challenge of the individual to society. The style of James Joyce, the style of Gertrude Stein—these are but exaggerated forms of what is true, more or less (chiefly less), of all who speak or write. Style is not necessarily self-conscious; there are moments, however, when it becomes so, in conscious rebellion against regimentation. Through such linguistic protagonists as Joyce and Stein, something in the speakers and writers of English finds a voice—it expresses a desire, a demand, for a new equilibrium in the language. The Joyces and the Steins are not only highly personal writers; they are linguistic symptoms. Now and then a man or a woman invents, before our eyes and ears, a word, or a phrase, or a mode of expression. Now and again a man or a woman incarnates a new attitude toward language altogether. Proust immerses himself in the so-called stream of consciousness; Joyce dives into a tributary of the same stream—muddier waters, perhaps, because he plunges into greater depths; Stein prefers whirlpools, from which come bubbling up series of slimy, primal repetitions. Whatever one may think of the success that attends these various experiments, one must feel

that they are intensely individual. They represent, among other things, the determination of a personality to create, rather than submit to, language. This is the very essence of the new style.

Style reveals us more than we know, because into our expression goes a great deal of which we are not conscious.

Style may reveal us, in addition, precisely because, in self-conscious purpose, we measure ourselves against the restrictions imposed by that great social convention which is language.

We are far more conscious about linguistic process than were our ancestors. To study language, to formulate laws about it, to compile grammars and dictionaries, is to be linguistically self-conscious. Such study, on the whole, is content to explain and formulate; it accepts what it finds. Those who use language for expression, and not as a subject for research, cannot remain satisfied with such acceptance. They are not content to sit by while language slowly evolves; they wish to play a part in, hasten, that evolution. They may admire Greek style and Latin construction and Sanskrit word-composition, but they are too much of their own day and of their own kind to submit unprotestingly to formulas based upon the physiology and the psychology of other peoples, so distant in time and space. They feel, or know, that life is a continuous readaptation of organism to environment, and that language, a form of important behavior, is no exception to this observation.

Many alliterative expressions reveal a sense of balance and a feeling for completion that dictate the rhythm and the content of the locution:

kith and kin
pots and pans
fire and flame
mice and men
wind and weather
the wide, wide world
grass-green
rose-red
this and that
tick-tock
riff-raff
topsy-turvy
tit for tat
neither fish, flesh, fowl, nor good red herring
sink or swim

weal and woe	wet the whistle
neither hair nor hide	Peter and Paul
sticks and stones	Hengist and Horsa

These are matched, of course, in all languages.

The magical potency of rhyme, which is psychologically associated with alliteration, is furthermore widely attested by all manner of folk verses. Recall what a preponderance of magic formulas are given in rhymed or alliterative form. Frequently, the accident of rhyme serves to suggest the belief or the superstition. We saw, when we dealt with folk etymology, how the folk mind seized upon the accident of a saint's name to associate, with that name, the cure of diseases that happened to rhyme with, or sound like, that name. The case is not different with such stanzas as those quoted by Nyrop: [2]

Spinne am Morgen,
Kummer und Sorgen;
Spinne am Mittag,
Glück für den dritten Tag;
Spinne am Abend,
Erquickend und labend.

Read in the original German, the lines seem to have a certain authenticity, especially for the naïve, the unsophisticated, the child.

Translate them literally into English, and the naïveté of the superstition is exposed:

Spider in the morning,
You'll have care and sorrow.
Spider at noon,
And the third day (that is, *the next*)
will be joyous.
Spider in the evening,
Refreshment and cheer.[3]

[2] *Das Leben der Wörte,* p. 197.

[3] Observe how the French find rhymes for the same superstition:

L'araignée du matin
Porte chagrin,
L'araignée du soir
Porte espoir.

Not only is the naïveté exposed; the lines almost lose meaning.

In English song, the *morrow* frequently brings *sorrow,* for no better reason than that the two words rhyme. That *gladness* and *sadness* come often together is as much an accident of rhyme (so far as concerns song and proverb) as of life. What excellent fortune for the popular songsters that *June* and *moon* and *spoon* rhyme, to less exigent ears, with *tune!* The poetaster is known by the rhymes that he keeps; *his rhymes, indeed, too obviously have suggested what he calls his thoughts.* This is at the bottom of the æsthetic objection to an excess of rhyme in poetry. There is always the suspicion that the rhyme has dictated the expression.

This use of rhyme has been caricatured by the poets themselves. Recall Thomas Hood's experiment in that seeming contradiction, rhymed blank verse:

> *Even is come; and from the dark Park, hark,*
> *The signal of the setting sun—one gun!*
> *And six is sounding from the chime, prime time*
> *To go and see the Drury-Lane Dane slain—*
> *Or hear Othello's jealous doubt spout out—*
> *Or Macbeth raving at that shade-made blade.*

Or consider the excellent nonsense verse by Christian Morgenstern, exponent of German *Galgenhumor,* or 'gallows humor.' Morgenstern died during the war. One of his funniest productions, I believe, was *Das Ästhetische Wiesel,* or *The Æsthetic Weasel.*

> *Ein Wiesel*
> *sass auf einem Kiesel*
> *inmitten Bachgeriesel.*
>
> *Wisst ihr*
> *weshalb?*
>
> *Das Mondkalb*
> *verriet es mir*
> *im Stillen:*
>
> *Das raffinier—*
> *te Tier*
> *tat's um des Reimes willen.*

To translate this adequately into English would take another Morgenstern. Obviously, in English a weasel does not rhyme with a *Kiesel* (a pebble). So that he would have to sit, say, on an easel. Nor could the weasel be sitting on an easel in the midst of a murmuring stream (*inmitten Bachgeriesel*). To approximate the effect of the original one must seek English rhymes.

A weasel
Sat on an easel
No taller than I'm.

Do you know why?
Neither did I,
Till a mooncalf
Made reply.

The weasel
Sat on the easel
For the sake of the rhyme.

§ 2. LONG WORDS AND SHORT—LATIN AND ANGLO-SAXON

It is humorless to establish a hard and fast rule as to the desirability of Anglo-Saxon words in preference to words that are derived from Greek and Latin. The short word is not always the word that is derived from Anglo-Saxon; the long word is not always the word that is derived from Latin or Greek. The entire question of short words versus long easily glides off into fallacy. The short word is not always to be preferred to the long, nor is it always the more efficacious. The short word is not always the more familiar of the terms at one's disposal.

How many know, without consulting the dictionary, the meanings of such words as *erg, dyne, sine?* They are short; but the first two are Greek, the third, Latin. Also, they are highly technical. *Erg* is from Greek *érgon,* which means 'work'; it is very familiar to us as the chief component of the word *energy*. *Dyne* is from Greek *dynamis,* meaning 'power'; it is very familiar to us as the chief component of such words

as *dynamic, dynamite, dynamo.* A *dynast* is a ruler, a governor, a prince: that is, one who has and wields power. A *dynasty* is, originally, a lordship, a sovereignty; to-day it refers rather to a succession of rulers belonging to the same family. At the root, however, is the conception of personal power, just as at the root of *dynamo* is the conception of mechanical power. *Sine* is a mathematical term that it would be profitless, outside of a course in mathematics, to define.

On the other hand, such long words as *loving-kindness* and *trustworthiness* are Anglo-Saxon, and perfectly familiar to all who speak English. The mere length of words is a psychological as well as a metrical matter. Greek and Latin compounds are made up in the same way that the Anglo-Saxon compounds are constructed. We understand such a word as *trustworthiness* at once, because we know what *trust* and *worth* are, and what the ending *-ness* signifies. If we understood, as readily, the elements of which Greek and Latin words were constructed, their meanings would be quite as clear and quite as readily discerned.

Let us compare two words that mean the same thing, one Anglo-Saxon in derivation, the other Latin: *endless* and *interminable.* The meaning of *endless* is seen at once; *end* is recognized as a definite noun, and *-less* as a definite ending still alive in the language. Now, *interminable* is quite as clear as *endless*—that is, to one trained in Latin. *In* is a prefix that has the same force, in this instance, as the suffix *-less* in *endless; termen* and *terminus* are Latin for 'boundary' or 'limit,' like Greek *terma,* and akin to Sanskrit *tar,* 'to go over.' The root is to be seen in numerous common English words, such as *terminus, term, determine, exterminate,* all of which include the central idea of a limit or boundary.

Often the choice between a long word and a short, between an Anglo-Saxon and a Latin or Greek, is determined by considerations of style—that is to say, by æsthetic requirements. For example, in trying to convey the feeling of boredom or weariness that comes with an over-long drive, one person will say, "The drive was endless." The other will say, "The drive

was interminable." In speech, perhaps, there would be little to choose between. One could so emphasize the word *endless* that the oral effect would be fully adequate. In writing, however, I should choose the word *interminable* precisely because it is longer than *endless* and less familiar, and thus adds to the suggestion of endlessness. The three additional syllables in the Latin derivative are an aural symbol of great length; the very sound of *interminable* is superior, for this purpose, to that of *endless,* which is said almost too quickly to produce the effect desired. It is of such choices as these, rather than of mechanical rules, that a finer style is fashioned.

English, as should be obvious to anyone with an ear, is fortunate in its multilingual structure. The Anglo-Saxon components and the Græco-Latin elements should not be looked upon as rivals, but as rich collaborators. The old teaching that taught us, if only by implication, to regard the Græco-Latin elements as affectations, as showy stylistic vestments, was prejudiced and short-sighted. It cannot be too often recalled that words as solitary objects exist only in the dictionary; everywhere else they exist in vital combination. Whether we select a long word or a short, an Anglo-Saxon word or a Græco-Latin one, depends frequently not only upon such stylistic problems as determined the choice of *interminable* in preference to *endless,* but also upon the rhythm, the cadence of our sentences.

I speak, of course, with prose chiefly in mind. It should not be necessary to emphasize the value of a large and varied vocabulary for the purposes of verse and poetry. Nor should it be necessary to insist that all good prose shares many of the characteristics that make poetry a peculiarly effective instrument of communication.

The beauty of Lincoln's "four score and seven years ago," as a paraphrase of "eighty-seven years ago" is achieved by *lengthening the phrase.* The use of the long phrase at once adds solemnity to the language, thus befitting a solemn dedicatory occasion. The use of "four score" further adds to the solemnity by calling up the idiom of the Bible. We do not

write, as it were, with rulers on our desks, or speak with stopwatches in our hands. The translators of the Bible, when they came to Proverbs XIII, 15, wrote down, "The way of transgressors is hard." They might have written, "The way of sinners is hard." It is not fanciful to behold, in their choice of the Latin word, an intuition that the longer term carried with it the feeling of greater solemnity. On the other hand, if a song familiar a few years ago had been sung, "Sing, you transgressors!" instead of "Sing, you sinners!" the effect would have been ridiculous, not to say (for some) mildly blasphemous.

To think, then, in terms of words, rather than in terms of phrases, is an elementary mistake. It is as if one were to think, musically, in terms of a single note, rather than in terms of a phrase or a melody. Not the long word, not the short word, not the Anglo-Saxon word, not the Græco-Latin word, is the focus of consideration. Rather is it the word that fits most effectively into the specific combination.

§ 3. "SLANGUAGE"

Of slang as a type of language I shall have a few words to say when considering the so-called minimum tongues. It has a certain stylistic quality, however, that makes it of interest in the present connection.

Emerson wrote in his Journal, on June 24, 1840:

> The language of the street is always strong. What can describe the folly and emptiness of scolding like the word *jawing*? I feel too the force of the double negative, though clean contrary to our grammar rules. And I confess to some pleasure from the stinging rhetoric of a rattling oath in the mouth of truckmen and teamsters. How laconic and brisk it is by the side of a page of the *North American Review*. Cut these words and they would bleed; they are vascular and alive; they walk and run. Moreover they who speak them have this elegancy, that they do not trip in their speech. It is a shower of bullets, whilst Cambridge men and Yale men correct themselves and begin again at every half sentence.
>
> I know nobody among my contemporaries except Carlyle who writes with any sinew and vivacity comparable to Plutarch and

Montaigne. Yet always this profane swearing and bar-room wit has salt and fire in it. I cannot now read Webster's speeches. Fuller and Browne and Milton are quick, but the list is soon ended. Goethe seems well alive, no pedant. Luther too.

This is the Emerson who, five years later, in the month of June, confided to his Journal:

One who wishes to refresh himself with the bone and sinew of society must avoid what is called the respectable portion of his city and neighborhood with as much care as in Europe a good traveller avoids American and English people.

It is perhaps true that such lines as these were written as much in self-reproach as in reproach of others. In this same month of June, Emerson had confessed that "even for those whom I really love I have not animal spirits." He was fond of Dante, one may be sure, for more reasons than one. Yet consider his entry of July 13, 1849.

I think, if I were professor of Rhetoric—teacher of the art of writing well to young men—I should use Dante for my text-book.[4] Come hither, youth, and learn how the brook that flows at the bottom of your garden, or the farmer who ploughs the adjacent field, your father and mother, your debts and credits, and your web of habits are the very best basis of poetry, and the material you must work up. Dante knew how to throw the weight of his body into each act, and is, like Byron, Burke, and Carlyle, the Rhetorician. I find him full of the *nobil volgare eloquenza*—that he knows "God damn," and can be rowdy if he please, and he does please.

It would be difficult, with any degree of justice, to accuse Emerson of wilful vulgarity. To find him praising Dante, of all poets, for his forthright proficiency in cursing is at once symptomatic and revelatory. Such "animal spirits" were not in Emerson; he could appreciate them, however, in others. To have discovered them in Dante was as discerning, in its way,

[4] It should at once amuse us and give us pause that Emerson, in a sentence that presents him imaginatively as a professor of Rhetoric, should commit a piece of questionable writing. The phrase, "teacher of the art of writing to young men" could easily mean "instructor (of young ladies, presumably) in the art of writing well *to* young men." What he plainly meant was "instructor to young men in the art of writing well."

as it was bold. The high moral cause in which Dante's genius was enlisted has served to soften the obvious fact that the cantos of the *Inferno* really comprise one long imprecation. Something of this heartiness Emerson missed in himself; in Dante, as in the truckmen and in the teamsters, he found it. In both the poet and the plebeians its linguistic expression was the substance of something real, something vital.

This is a quality of much slang—slang at its source rather than in midstream, when, to swap metaphors in midstream, it has become self-conscious and exhibitionistic. The sources of "slanguage" are the sources of language, and none other. The process, if not the attitude, is the same. As language, in its beginnings, is largely poetic, so is slang. Slang, indeed, is frequently but the bare bones, or the ill-covered bones, of orthodox language. It is language that has developed a connotation of its own, differing not so much in meaning as in overtones. Slang repeats, and naturally, the metaphoric origins of speech. It repeats, unknowingly, the very structure of the most self-consciously respectable words.

Consider the term *wised-up*. Its overtones are distinctly of the street, even of the gutter. "I'm wise to you" means that I'm sufficiently aware of your tricks to be on my guard against them. To be *wised-up* means to have acquired, through experience, generally of an unpleasant nature, a like awareness of the world's trickiness and a like protective vigilance.

Consider now the words *sophisticated* and *sophisticate*. I remember that in my childhood it was considered an insult to be called—especially if one were a girl—sophisticated. More than once, present at a quarrel between two grammar school lasses, I heard, as the crowning accusation, "You sophisticated thing!" It was a fighting word. To-day, besides being a much overworked locution, it is a badge of pride in certain circles. A *sophisticate* (as a noun the word is of our own day) is one who has attained worldly wisdom.

Observe now the linguistic sensitivity of the grammar school girls that I have mentioned. Sophistry, though etymologically akin to the Greek *sophia,* meaning 'wisdom,' (this gives us

also the widely used girl's name) has always lived under a cloud. A *sophist* was a teacher of rhetoric; he was also, like so many rhetoricians, exposed to the temptation of trickery with words. Hence *sophistic* or *sophistical* in the sense of *adulterated.* Hence the verb *sophisticate,* meaning to adulterate or to falsify, to debase, corrupt. Worldly wisdom thus appears to be more worldly than wise; this is, of course, a theological view.

Yet, for all the basic similarity of *wised-up* and *sophisticated,* one is more patently slang than is the other. One belongs to the gutter, while the other is to be found in the drawing-room. There is a point at which they meet—say, at a prize-fight, or in a night-club.

The phrase *hell of a time* suggests, even to the ear of a linguistic liberal, self-expression in one of its more expansive, or less guarded, moments. On the contrary, when examined, such a phrase appears to contain a deep reservoir of emotional and poetic power. Long usage, of course, has deprived it of its original effectiveness. Hell, once a fire of punishment, as in the days of Dante, has become but a pale and fireless oath. Such is the fate of most mythologies. We swear, if we are literary, or old-fashioned, by Jove; but what is Jove to-day, outside of the classical dictionary? The Italian still swears by Bacchus, but Bacchus has gone to join Jove. *Hell of a time* suggests, to the contemporary ear, the classics least of all. Yet it is found in Number 120 of Shakespeare's Sonnets, in a form that may serve to explain its origin and that, with the lack of a single word, keeps it still the poetic phrase that it was in the beginning.

> *For if you were by my unkindness shaken*
> *As I by yours, you've passed a hell of time,*
> *And I, a tyrant, have no leisure taken*
> *To weigh how once I suffered in your crime.*

Hell of time and *hell of a time* are divided in meaning and in power by more than the *a* of modern slang. Hell, in the old mythology, in the conception that stirred Dante as he fulfilled his private vengeances in the first third of his theolog-

ical epic, was eternal. A *hell of time* is an eternity of burning, which frustrated lovers no less than vindictive haters can understand. *A hell of a time* emphasizes the burning—i. e., the suffering—rather than the eternity, yet the core of the phrase remains the undying flame of punishment.

Take such expressions as *highbrow* and *supercilious.* About the latter word there is no breath of slang. In Latin, *supercilium* means 'the eyebrow,' or 'the region of the eyebrows.' *Cilium* is 'the eyelid'; *super* means 'above.' Perhaps the human habit of raising one's brows to express scornful superiority suggested the adjective supercilious. *Highbrow* has much of this same connotation. It suggests, more specifically, the scorn, or the exclusiveness, of intellectual superiority. *Lowbrow* (a reference to ape anatomy) is an obvious antonym. *Mezzo-brow* or *mediumbrow* are equally obvious coinages intended to describe what used to be called *l'homme sensuel moyen,* or 'the average sensual person.' Sometimes the superciliousness of the intellectual person takes a strange form. He seeks to deny that he is a *highbrow.* For *highbrowism* is to the social life what pedantry is to the intellectual; it connotes an aloofness from normal interests. The *highbrow* supposedly dwells in a high tower—"laboriously wrought in Orient ivory." In much the same way the noun *intellectual* has been saturated, in our day, with connotations of social aloofness, of impotency with respect to the pressing problems of the practical life. So that we have the additional paradox of learned citizens denying that they are intellectuals. In just this way does circumstance bleed words of their meanings, to use the rich Emersonian figure, or, as sometimes happens, pour new blood into them as if by social transfusion.

There is, among many speakers and writers, an excessive gentility that may be regarded, from this standpoint, as the opposite of slang. It reveals itself in hyper-niceties of pronunciation, of diction, of grammar.

Split infinitives are avoided not because they are less clear than some other form of expression might be, but because they are split—because an adverb intervenes between the *to*

and the infinitive. If one forgets rules for rules' sake, looking at and listening bravely to such a split infinitive as "I want to brightly shine," he may discover that it is quite as clear and quite as effective as "I want to shine brightly," and certainly better than "I want brightly to shine." Circumstances alter split infinitives. And circumstances sometimes suggest that the preposition—all *fuddy-duddies* to the contrary—is just the word to end the sentence *with.*

Much weight has been lost by many timid souls over the question whether *none* should take the singular or the plural verb; whether one should say, "This is one of the best books that has—or that have—ever been written"; whether collective nouns take singular or plural verbs: "a number of books is—or are—listed." I mention these doubts in a chapter on style because it seems to me that the elements of individual choice and of circumstantial influence are present. Once again we face a conflict between logical and psychological determinants.

The nervous conflict between *will* and *shall* also has its stylistic references. I cannot take it seriously. When a set of rules such as those governing these verbs causes so much confusion, it is time to achieve by some other linguistic device the effects sought by the rules.

The problems here overflow into the turbulent waters of purism.

CHAPTER XVIII

PURISM

As perfect silence, undisturbed for years,
Will breed at length a humming in the ears,
So from their very purity within
Arise the promptings of their only sin.
W. S. GILBERT, Prologue to *The Wicked World.*

"It is always better to be *vulgarly* right than *politely* wrong." NOAH WEBSTER.

§ 1. TOO PURE

IT IS POSSIBLE TO BECOME TOO SELF-CONSCIOUS ABOUT WORDS, as about the visible and invisible functions of the human mechanism. As this excessive consciousness of bodily function may lead to that cluster of nervous symptoms called a neurosis, so may an excessive consciousness of words—their grouping, their meaning, their derivation—lead to what may be called, metaphorically, a linguistic neurosis.

There are persons who, by taking too much thought about verbal detail, subtract cubits from their stylistic stature. Thought spent upon clearness and force of expression is surely not wasted. Meticulousness, however—and *meticulous* is a word much abused in these days—engenders finickiness, which may contaminate language as it may contaminate living itself. *Meticulous* properly contains the idea of timorousness; it is from the Latin *metum,* 'fear,' and suggests that degree of carefulness which is colored by anxiety. As popularly employed—and, perhaps, as ultimately to be defined and accepted—it is synonymous with *over-careful, fussy, anxiously precise.*

Let me adduce, as an example of finickiness, the objection of Richard Grant White to the almost universal employment

of the word *marry*. "Properly speaking, a man is not married to a woman, or married with her; nor are a man or a woman married with each other. The woman is married to the man. . . . The etymology of the word agrees entirely with the conditions of the act which it expresses. To marry is to give, or to be given, to a husband, *mari*."

To marry, truly enough, contains the French word for 'husband.' Perhaps, too, the use of the word to mean 'to wed,' whether from the point of view of the woman or of the man, is testimony to the domination of man over woman. Mr. White, indeed, seems in his comments to share this masculine outlook. "It is her name that is lost in his," he writes, "not his in hers; she becomes a member of his family, not he of hers; it is her life that is merged, or supposed to be merged, in his, not his in hers. And thus, manifestly, she has been attached to him by a legal bond, not he to her; except, indeed, as all attachment is mutual. But, nevertheless, we do not speak of tying a ship to a boat, but a boat to a ship. And so long, at least, as man is the larger, the stronger, the more individually important, as long as woman generally lives in her husband's house and bears his name—still more should she not bear his name—it is the woman who is married to the man."

This was anachronistic even while it was being written, some time in 1870. For, although the movement for the emancipation of woman had not yet produced the personalities of Ellen Key and Olive Schreiner, nor the domestic dramas of Henrik Ibsen, England knew Godwin and Mary Wollstonecraft. More to the point, the extended English meaning of *to marry* was accepted also in France, despite the etymology from *mari,* 'husband.'

There are other words for *marry; to husband* and *to wive* are old verbs for taking a husband or a wife. *To espouse* meant to marry either a man or a woman; one may *espouse* also a cause. *To wed,* as *to espouse,* descends from a word meaning a pledge; espouse, through French *épouse* (wife, or pledged one), comes from Latin *sponsa* (pledged); wed comes

from Anglo-Saxon *wedd,* 'a pledge.' In Spanish, when one weds, one is housed (*casar,* 'to marry'; *casa,* 'a house'). This use is not unknown in English. Othello, in Act I, scene iii, of *Othello,* addresses his betrayer thus:

> *for know, Iago,*
> *But that I love the gentle Desdemona,*
> *I would not my unhoused free condition*
> *Put into a circumscription and confine*
> *For the sea's worth.*

Unhoused here clearly means unmarried.

A like attitude toward the literal meanings of words at their source would frown upon the use of the word *parent* to denote anyone but the mother. For parent is derived from Latin, *parere,* 'to bring forth.' *Oviparous* animals are those that bring forth by means of the egg; a *primipara,* in medical parlance, is a woman who is giving birth for the first time. Nevertheless we continue to regard the father as one of the parents—as one of the begetters. Not only this, but the word *parent,* by extension, and in frank defiance (or, rather, forgetfulness) of its etymology, is regularly used in French (*parent*) and in Spanish (*pariente*), not to speak of other tongues, to mean a 'relative,' and in Spanish even a 'wife.'

The obsolete word *parent,* in the sense of *apparent,* is derived, like the more familiar word, from Latin *apparere,* 'to appear'; this, in turn, is composed of *ad* and *parere,* meaning 'to come into sight,' that is, 'to come forth.' Every birth is, after all, an appearance.

§ 2. NEOLOGISMS—THE ETYMOLOGICAL FALLACY

Novelty-Hunting, or the casting about for words of which one can feel not that they give one's meaning more intelligibly or exactly than those the man in the street would have used in expressing the same thing, but that they are not the ones that would have occurred to him, is a confession of weakness. Anyone can say *improvement* and *complexity* and *conception* and *ancestors* and *title-rôle;* I will say BETTERMENT and COMPLICACY and CONCEPT and FOREBEARS and *name-part.* Why? Obviously because, there being

nothing new in what I have to say, I must make up for its staleness by something new in the way I say it. And if that were all, if each novelty-hunter struck out a line for himself, we could be content to register novelty-hunting as a useful outward sign of inward dullness, and leave such writers carefully alone. Unluckily they hunt in packs, and when one of them has such a find as ASSET or HAPPENINGS or FORCEFUL or MENTALITY they are all in full cry after it, till it becomes a VOGUE-WORD, to the great detriment of the language.

Thus Fowler in his indispensable but not infallible *Modern English Usage*.[1]

Let us agree at once that novelty for its own sake involves the error of false emphasis. Let us agree, too, that the avoidance of novelty, out of a fear of being new, also involves a sort of false underemphasis. I am reminded of some lines from Pope, which used to be quoted at us in school with the approval of the master:

> *Be not the first by whom the new are tried*
> *Nor yet the last to lay the old aside.*

Now, that has always struck me as a cowardly, unoriginal statement. Pope was referring to words, as Fowler—in the above quotation—refers to them. And I feel, in general, toward Fowler, in this instance, as I did toward Pope.

Not that Fowler is altogether wrong. We all know the novelty-hunter who uses his neologisms because he wishes to stun his reader; such a hunter has the soul, not of a writer, but of a cheap journalist. There is a Spanish critic who bases almost an entire case against the novel as an art-form (especially the contemporary novel) on the argument that *novel* means *new,* and that the chief purpose of the novel is to bring news, sensation, superficial appeal. The novel-addict is, so to speak, a novelty-hunter.

But I object when Fowler *arbitrarily* opposes *improvement* to *betterment,* and *title-rôle* to *name-part,* and *ancestors* to

[1] H. W. Fowler, *A Dictionary of Modern English Usage* (Oxford University Press, 1927).

forebears. Peculiarly enough, of each of these pairs he favors the Latin, rather than the Anglo-Saxon, derivative. Is Fowler, in his eagerness to avoid novelty, thrusting his students back into a stereotyped linguistic etiquette? This is not the manner in which a language grows—certainly not the way in which our rich English speech has taken to itself color, ductility, grandeur.

There are times when, Fowler to the contrary notwithstanding, I would use the word *betterment* and not *improvement*. The first of these words is accented, for example, on the first syllable; the second is accented on the second. The prose rhythm of my sentence, if I were writing with special attention to cadence, might demand a word with an accent on the first syllable rather than on the second. The meaning of a phrase or a sentence is conveyed not only by the words themselves, but as well by the total effect of their grouping. Let me give an instance that occurs at once to my mind. The friends of W. S. Gilbert, casting about for a line or two that might summarize his life, hit upon this:

Folly was his foe;
Wit was his weapon.

The meaning was excellent, but something was lacking in the total effect of the words until it was discovered that the self-same words would be most effectively transposed into

His foe was folly and his weapon, wit.

That not only made a good Shakespearian iamb, but it gave tone, point, emphasis, finality to the sentiment. The man who writes professionally, and who considers his job to be something more than word-slinging—who likes now and then to get a lilt into his line—to add in rhythm and cadence a subtle something that makes of the phrase a whole that is greater than the mere sum of its parts—will naturally experiment with words, with synonyms, with paraphrases. He will not be scared away by the Fowlers, valuable as they are in giving a sense of the language as a whole. He will have forefathers

(like Lincoln, in his Gettysburg address) as well as ancestors; he will better his style as well as improve it; and he will have, in his play, name-parts as well as title-rôles.

Let us continue then, not to hunt novelties, but to seek new subtleties in an old, old speech. The letter killeth; the spirit giveth life. And the spirit of a language demands variety as a counterpoint to its basal unity. Novelty-hunting may be —it often is—a sign of inward dullness. But not on that account is outward dullness a sign of inward novelty. The good Lord delay the coming of that day on which we shall all write alike, even if that likeness be founded upon the generally excellent precepts of the generally excellent *Dictionary of Modern English Usage!*

There are unwitting neologisms. Sometimes, with the sound of another—and unrelated—word in one's mind, one twists a good English term out of shape and thus, without intention, adds to the vocabulary. I have done so at least twice; what is worse, the freshly minted hybrid actually escaped both the proofreader and me, and found its way into a book. The first was *termagacious;* the second, *macabrous.* Now, of course, I don't have to be told that these words do not exist; I knew all along that they didn't. But, for some reason or other, setting down what was meant to be *termagant,* I must have thought of *sagacious,* and then telescoped the words. As for *macabrous: danse macabre* occurs often in what I write and what I read; the word *macabre* is one of the first foreign terms I learned; it refers to the dance of death, and means, in general, 'gruesome.' Some etymologists have traced it to the proper name Macabré, a painter; others believe that it derives, ultimately, from Maccabeus. What made me write *macabrous?* Well, in the first place, there is an adjective *macaberesque;* there is also the word *scabrous,* meaning 'rough to the touch,' 'scaly,' and at times applied to the sort of thing in literature that passes as "rough stuff."

New words have been coined with less warrant. I bring these up, however, not to justify my lapses, but to show how easy it is for a trained writer to slip; the more easy, in this

instance, because of his training, and the myriads of overtones that keep sounding in his head while he's trying to make a little intelligible music out of his thoughts.

That peculiar book, *The Effect of the Misuse of Familiar Words on the Character of Men and the Fate of Nations,* published by David Urquhart in London more than eighty years ago, is saturated by the etymological fallacy. It betrays an almost wilful failure to understand that the meaning of a word may be distinct from its history. It is interesting to know, for example, that the Greek word *turannos,* which gives us our word *tyrant,* did not mean originally what we mean by the term; or that the Latin word *religio* did not, and could not, mean what *religion* means to us. Changes in individual and collective evolution are reflected in changes of meaning. At twenty we are not what we were at ten, nor what we shall be at seventy. Shall we, therefore, rename ourselves on each birthday?

Turannos supposedly is derived from Turan, home of the Turanians, who were governed by a tribal chief. To the Greeks, says Mr. Urquhart, the term meant "nothing more than a Turk." The title of Sophocles' tragedy *Œdipus Tyrannos* is erroneously translated *Œdipus the Tyrant,* for to us a tyrant is a ruler who has come to power through violence or by usurpation, and maintains it by cruelty and in defiance of constituted authority. The Latin of Sophocles' title is *Œdipus Rex,* which is to say *Œdipus the King.* It is curious to find Shelley offering, as translation, *Swellfoot the Tyrant.* The literalness that produced Swellfoot might well have exercised a like literality upon the second word. Incidentally, observe what a deflation of dignity is suffered by the name Œdipus when translated into its simple English equivalent. Could we with comfort speak of a Swellfoot complex? There *is* something in a name.

Is the etymology of the Greek word *turannos* therefore to be advanced as a reason for redefining *tyrant* in English? Mr. Urquhart would have had it so. Suppose that the Greeks had

been as finicking as Mr. Urquhart. They would have stopped at *turannos* in the sense of Turk, and the title *Œdipus Turannos* would never have been thought of. Such a course would have been opposed to the manner in which not only language, but human thought, operates.

A little etymology is, and a great deal of etymology may be, a dangerous thing. *Noon,* for example, comes from the expression *nona hora,* the ninth hour. For the medieval monk the day began at three in the morning; twelve o'clock, or midday, would therefore be the ninth hour, or *noon.* Shall we, therefore, to please the pedantic Urquharts, reject our word *noon* in its contemporary significance? The Spaniard takes his *siesta* (that is, *sexta hora,* or 'sixth hour') regardless of etymology. What he desires is coolness and repose, not a treatise on phonetics and semantics. He is no more interested, as a human being in need of comfort, in the history of the word *siesta* than in the fact that September is, etymologically, the seventh month of the year and not, as in his calendar, the ninth.

There is a sense, then, in which the Humpty Dumpty principle holds good: words mean what we say they mean.

§ 3. WHAT 'GET' BEGETS

It is likewise the etymological fallacy that lies behind Mr. A. P. Herbert's passionate objection to the protean qualities of that homely verb *get.* Mr. Herbert, unlike Shakespeare, appears to have had much Latin and more Greek. And less English. "But I know that somewhere, some pastor or master did sternly remark to me that the popular word 'get' means acquire or obtain, and that to use it with the sense of 'become' or 'go,' for example, was slang, slovenly and horrible." [2]

This is an old linguistic sore, from which Mr. Herbert rips the bandages and starts it bleeding all over again. This much

[2] A. P. Herbert, *What A Word!* (Doubleday, Doran and Co., 1936), pp. 213–218. This is, despite any differences I may have with it, an excellent—and a humorous!—book.

one must say for the English humorist: he has respect, but not veneration, for the dictionary. Just why he should respect, and venerate, a pastor or master of his boyhood rather than the collaborative wisdom of the *Oxford* or *Webster's* is a matter of logic rather than of language, perhaps. He is worried, for example, by the plight of a Frenchman who shall look up the word in one of our modern dictionaries, standing aghast at the multiplicity of meanings, original and derived. Do Frenchmen worry thus about Englishmen confronted by French idioms? "Whatever the literary critics may do," decides Herbert, after reviewing the lexicographical gathering of 'gets,' "I shall never desert the old man. For he was the only man who taught me anything about English; and that was the one thing he taught me."

Get is one of those words that, from the very nature of its etymology, was predestined to branch off into hundreds of extended meanings. It is akin to words in the Teutonic tongues, the Latin, the Greek, for such concepts as *to find, to seize, to hold.* Its elements are to be discovered in such familiar English words as *beget, comprehend, enterprise, forget, impregnable, prehensile.* Had it, as a root, remained true to its original meanings, it would not have become, for us, a verb indicating *to acquire* or *to obtain.* It would have remained in its primitive sense of *finding, holding, seizing.*

Herbert, who desires this word to have remained without offspring, lists many of the phrases that *get* has begotten, and disowns them, condemning them to a species of linguistic bastardy. They are among the most familiar colloquialisms of the tongue, examples of which, indeed, are to be found in the King James version of the Bible, and in Shakespeare.

"I am the God of Bethel, where thou anointedst the pillar, and where thou vowedst a vow unto me: now arise, get thee out from this land, and return unto the land of thy kindred." (*Genesis,* xxxi, 13.)

"*Get thee to a nunnery.*" (Shakespeare; *Hamlet, Act III, scene i.*)

As for the intransitive *get,* meaning, among other things, 'to become,' it is so firmly established in the language that to

combat it is virtually an affectation. It is really nothing to get excited about, at this late date. Getting excited about it is as much an emotional as a linguistic phenomenon—a verbal fixation, of which, among purists, there are many. Each of us has his private verbal fixation, which often seems to exempt us from the observation of most other regulations. Thus Mr. Herbert, in the midst of an eloquent diatribe against the multiplicative misuse of the word *issue,* coming to the consideration of the word in army usage ("I *issued* Private X *with* a tooth-brush") introduces the heinous phrase with this comment:

"From this use has (*sic*) sprung certain quaint verb-specimens. . . ." [3]

Nobody can convince me that Mr. Herbert does not know the difference between a singular and a plural subject. If the error was not attributable to the typesetter, it must have eluded the vigilance of the hyper-grammatical author as a sort of revenge of the unconscious mind upon his too conscious mentality.

The best criticism of Mr. Herbert's belated campaign against the go-getting habits of *get* was written when Herbert was still under the ministrations of his punctilious pastor-master, some thirty-seven years ago. It is to be found in that classic of English philology, Greenough and Kittredge's *Words and Their Ways in English Speech.* What Herbert thinks of *grow* in the sense of *to become,* I do not know; the passage from the Harvard authors quoted below, however, deals (in my opinion) finally with the cluster of puristic attitudes that it considers.

> The different words which have so faded as to be mere synonyms for *become,* are interesting. The old verb *to worth* (Anglo-Saxon *weorthan*), cognate with German *werden,* has disappeared, except in the poetical phrase, "Woe worth the day!" (i. e. "May woe happen to the day!"), a curse used as an exclamation of sorrow. *Become,* once meaning "arrive," has taken its place, but is now so colorless that other more vivid words have been summoned to its aid. Thus we say: "The weather *grew* cold," "He *turned* green with envy,"

[3] *Ibid.,* p. 222.

and in older English *wax,* "to grow," was similarly used, as in the Biblical "Jeshurun *waxed* fat and kicked." *Go,* which has long been common in such phrases as "go lame," said of a horse, is somewhat overused by recent writers in expressions like "she went white," "he went stale," "Old Adrian, penned in the landing corner, went gray of face," and the like. *Get* is another synonym, as in "to get tired," and Coleridge's "His chariot wheels *get* hot by driving fast." It is peculiarly idiomatic in certain phrases, as *to get rid of, to get angry.* Martinets frequently object to these *get's,* because they think that the verb must always mean "to acquire," but such an objection ignores all linguistic principles, as well as the facts of good usage.[4]

More often than there should be, there is a certain petulant element to purism. This may be bound up, too, with pride of social stratum.

The song of the Gershwin brothers, "Let's Call the Whole Thing Off," popular during the summer of 1937, set to music the humor of the differences between *either* pronounced so as to rhyme in the one case with *breather* or in the other with *lither,* and between *tomato* and *potato* pronounced so as to rhyme in the one case with *Cato* and *Plato,* and in the other with *rubato* or *Amato.* The relative differences are not important. There are persons who are born, as it were, to the pronunciations with the *ī* sound rather than the *é* in *either* and *neither,* as there are persons who are born to the sound of the continental *a* rather than the long *a* in tomato. There are many others, however, who see, in a change of pronunciation, a change of class, and seek such a distinction in a vowel.

Neither pronunciation of *either* is the original, which was more like *ayther* (long *a*). As for *tomato,* the firm of Campbell, which markets immense quantities of tomato soup, uses the pronunciation with the long *a.* This will have little influence, however, with those who discover, in the continental *a,* a social superiority. I hardly need add that I do not impugn the pronunciation with the continental *a,* especially among those to whom it comes naturally, from their normal

[4] Greenough and Kittredge. *Words and Their Ways in English Speech* (Oxford University Press, 1927), p. 237.

surroundings. I have in mind chiefly those who make a conscious change from one vowel to another in the illusion that the change of vowel confers change of social status. The latter attitude would come under the heading of linguistic, or even phonetic, snobbery, which is a very real, if not highly commendable, quality.

Purism, however, concerns itself more with the usage and less with the pronunciation of words. A preoccupation with pronunciation should be cured partially by consulting, in any large dictionary, the long, long list of variations in accent and vowels. That words should carry connotations of social position is natural. Certain words arise in, and are largely confined to, the higher social strata, or the lower, as the case may be. Much slang, for example, bears clearly the stamp of its origin, but manages to rise in the social scale. Other words, like those who use them, decline. There are times in the history of many words when they waver between one meaning and another, and finally cross into a different semantic area. The history of purism is replete with triumphs and defeats for the purists; to a certain number of defeats they are foredoomed by the very nature of language, which must change or become stagnant and breed the decay of stagnancy.

There is a difference, for example, between the attitude of such a stickler as Ambrose Bierce toward, on the one hand, the word *admission* as used for *admittance* and, on the other, toward the word *commence* as used for *begin*. There is still an advantage in employing the word *admittance* to mean 'right of entry,' and *admission* to mean 'a statement admitted.' At least, there is clear ground for discussion, although the dictionary to-day, while preserving the distinctions between the words, gives each as a definition of the other. Indeed, the *New Webster's International Dictionary* contradicts directly the inferences of Mr. Bierce's distinction. Bierce [5] gives, as an example of erroneous usage, the sentence, "The price of admission is one dollar." *Webster's,* distinguishing

[5] See Bierce's concise, and often amusing, *Write It Right,* under the words discussed.

between *admittance* and *admission,* notes the prevalence of the first in its literal significance of "allowing one to enter a locality or a building"; when, however, entrance "carries with it certain privileges, *admission* rather than *admittance* is used; as *admission* to a theater. . . ."

Dictionaries, as we shall discover, are not regarded by men of words as infallible authorities. From the earliest days to the latest tick of the clock they have been challenged heatedly as craven registers, as too inclusive repositories, as swollen lexicographical megatheria. It is good that they should be forever challenged, if only to remind the rest of us that they are compiled by fallible mortals—mortals just as fallible, but by that same token just as capable, as the Bierces. The dictionaries, moreover, represent a consensus of specially trained investigators; the contemporary dictionary is thus not quite so open to the charges that were made against the first compilers—lone individuals who at times vented, like Johnson, their personal spites in their definitions.

Bierce, strong individualist that he was, tended like all such folk to confuse his predilections with a law of nature. Under *commence* he writes, "This is not actually incorrect, but—well, it is a matter of taste." In the treatment of this word, somehow or other, the petulance of purists is tempted. *Commence,* which comes to us from the French, is a word of honorable lineage. It is derived from the Latin *com* and *initiare,* 'to begin.' *Initiare* itself is indirectly from *in* plus *ire,* that is, 'to go in.' (An initial is thus a letter that begins a word.)

Why, then, the unceasing campaign against *commence,* often with the implication of Bierce that persons of finer taste do not employ it? Fowler, in his *Dictionary of Modern English Usage,* cannot resist a similar, though qualified, slur. "The writers who prefer *ere* & *save* to *before* & *except,*" he says, "may be expected to prefer *c* to *begin* (*ning*) in all contexts." Fowler allows it, to be sure, in more formal writing; moreover, he indicates a valuable distinction: *commence* "retains more than *begin* the positive sense of initiative or

intention, & is especially out of place with an infinitive when this sense is absent, as in *Even the warmest supporter of the Government of the Exchequer must be* commencing to feel *that he should give some slight consideration to. . . .*"

Myself, I commence to feel that the wall between *commence* and *begin* begins to crumble. Often the choice between them is a matter of taste, but not in the way that Bierce would have us believe.

Here is another Bierceism, and one that may be symptomatic for all purists, on *space* as used for *period: A long space of time.* "Space is so different a thing from time that the two do not go well together."

This is much too literal, and reveals, rather surprisingly in Bierce, a lack of poetic feeling for language. Shakespeare speaks of "three days' space," and of "three years' space."

Biron: *Let me say no, my liege, an if you please.*
I only swore to study with your grace
And stay here in your court for three years' space.
(*Love's Labour's Lost, Act I, scene i*)

In *Henry VI,* Part II, scene ii of Act III, we find the King declaring

Had I but said, I would have kept my word;
But when I swear, it is irrevocable.
If, after three days' space, thou here be'st found
On any ground that I am ruler of,
The world shall not be ransom for thy life.

The truth is that space and time, far from being so different from one another that "the two do not go well together," go together very well. So well, indeed, that our own day has witnessed the invention of the word *space-time!* So well, indeed, that calendars are a representation of time in space—that the dials of watches and clocks are spaces across which time is made seemingly to move. The word *space,* in truth, may be akin to the Sanskrit *spahy,* 'to grow fat,' 'to increase,' through the Latin *spatium,* and therefore, through *spahy* to our word *speed.* The statement of Bierce is one of those ob-

servations that bears, when written, a specious air of verity. When examined, however, it crumbles to dust. If there are two human ideas that *do* go together, and well together, they are the ideas of time and space.

Someone should have pointed out to Bierce Revelation, II, 20:

"and I gave her [i. e., Jezebel] space to repent."

There is a touch of petulance in the refusal of Mr. Weekley, excellent lexicographer though he be, to spell morale with the *e*. Since the war of 1914–1918 especially, the distinction between *moral* and *morale* has been impressed upon a whole generation; it is a true distinction and one worth maintaining, even at the cost of an extra *e*. The difference in spelling, moreover, helps to maintain a difference in pronunciation. To refuse to spell the word with an *e* is virtually to help the disappearance of the distinction and the word both.

The purist resists the introduction of neologisms as he resists the vanishing of established forms. He does not often display, in the contemplation of new words, that scientific temper which the research-worker in a chemical laboratory brings to bear upon the examination of bacteria. He is likely, on the contrary, to seek for his verbal antipathies a personal substitute. He will contemn not only the emergent word *colorful* but the users of the word as well. He will not only object to a new meaning for the verb *to condition,* but will hint aspersions upon those who employ it. By a sort of retribution, both Weekley and Herbert persistently employ *claim* in the sense of *assert* or *maintain*. But let us not be petulant with them; nor with those who protest so loudly against back-formations: *donate* from *donation* and *enthuse* from *enthusiasm*. There are more ways than one to kill a cat and to make a word. *Reliable,* as so many writers of a past generation informed their contemporaries, is a stupid word. It should be *relie-on-able*. There is much useful absurdity in the world, however, and *reliable* went into the language because there was a place and a need for it. If there is a sufficient need for

donate and *enthuse,* they will (as they promise to do) take their places with *colorful,* a word that should never have been debated.

Let us have purity. But between purity and purism is a difference that transcends language.

§ 4. WHAT IS A DICTIONARY?

The modern dictionaries, says Mr. Herbert, in one of his characteristic paragraphs, "are pusillanimous works, preferring feebly to record what has been done than to say what ought to be done."

Pausing for a moment to question the construction of "preferring . . . than," may I suggest that Mr. Herbert's attitude toward the dictionary is personal rather than scientific, and that it refers more properly to an age that sought to impose usage rather than to provide the materials for choice. In 1721, Nathaniel Bailey (*Universal Etymological English Dictionary*) announced it as his intention to "fix the language by means of a Standard Dictionary, which should register the proper sense and use of every word and phrase, from which no polite writer henceforth would be expected to deviate."

This is not science; it is dictatorship. It is a static, even a moralistic, conception of words—words, which cannot stand still any more than life. It is a desire to fix that which is vital flux. Without deviation no progress is possible in language. Bailey's attitude was much like that of Mr. White with the word *marriage.* But words changed before the time of Mr. Bailey, and they have persisted in changing since the time of Mr. White. The very word *dictionary,* were Mr. Bailey an adherent of his own principles, would not have been employed by him as a title for his book. A dictionary, originally, was a phrase-book, a list of words. *Diction* is still, in English, a word misused to mean pronunciation instead of the choice of words.

If Mr. Herbert desires an Academy of Diction, very well; he would receive my vote for the presidency. But the diction-

ary is in different case. It is a most catholic institution. It is, in baseball parlance, a score-keeper, not an umpire. The presence of a word or expression in the dictionary—and none knows this better than Mr. Herbert himself—does not absolve the one who uses the volume from exercising taste or discretion. The dictionary is a register of deeds, not a court of appeal.

It follows; it does not lead. In the eyes of its makers, every word used by the speakers of a language is entitled to citizenship. The conferring of citizenship is a civic, not an æsthetic, act; it does not establish rank. Life alone, the speech of the living, makes words and destroys them.

CHAPTER XIX

LANGUAGES, RACES, AND CULTURES

The history of the human mind is the history of the traditions of social culture. ROBERT BRIFFAULT, in *Reasons for Anger.*

Each people is tempted to find that it places its words in the correct order. MICHEL BRÉAL, in *Essai de sémantique.*

But there is no language without i's own peculiar genius, and therefore none without its separate powers and advantages. DEQUINCEY.

§ 1. DEGREES OF DIVERGENCE

WE HAVE SEEN THAT LANGUAGE, IN EVERY ASPECT, IS forever undergoing change—that sounds, meanings, and functions (phonetics, semantics, and grammar) exist in an unstable equilibrium.

In a rather free sense, it is true that none of us ever speaks precisely the same language twice. As children, we have a vocabulary that varies from that of our parents, if only because our interests and our environments are different from those of our elders. As students we have a different vocabulary from, and perhaps a more careful grammar and phonetics than, those who are out of school. As members of this club or that, of this social group or that, we use a special vocabulary relating to special requirements. As friends, we employ a more colloquial, slangy language than we would use in more formal relationships. We are forever adjusting our choice of terms, our choice of construction, and even our choice of pronunciation, as in "lovers' talk," and talk to babies.

There is no serious misunderstanding, however, as long as we hold comfortably near to what has been accepted as the norm for our language. Shop-talk, college lingo, slang, cock-

ney dialect, regional dialects—these exhibit marked differences, but they revolve, as it were, around the linguistic standard. Here and there a pronunciation makes us laugh—simply because it is not ours, and for no higher reason; here and there a special term is unfamiliar to our ears, and we must ask or look up its meaning; here and there a construction sounds unorthodox. But we recognize these various divergences *as divergences*. They revolve about a familiar norm; they still imply, rather than abandon, a standard.

The various terms for linguistic divergence—slang, argot, trade tongues (sometimes called minimum tongues, as containing the minimum of linguistic material for intercommunication), dialects—indicate chiefly a degree of divergence. From one important point of view the line between dialects and languages is not a linguistic distinction, but rather one of geographical, or historical, or economic significance. Nor is the line between argots, thieves' slang, jargons, professional cant, and other types of lesser language, or of language-within-language, invariably a sharp one.

Naturally, one of the chief characteristics of thieves' slang or argot is that of secrecy. (*Argot* is a French adaptation of the word *jargon*.) *Cant* implies stereotypical, insincere phraseology—routine words with little heart or mind behind them. *Jargon,* in addition to the suggestion of *argot,* has, in other connotations, the idea of a linguistic mixture or jumble; it is often replaced by the word *lingo*.

What determines, ultimately, the difference between a dialect and a language is appreciably the socio-economic or the literary fortune of the people that speaks it. One may often say that a language is a rich dialect—rich in the economic sense; and that a dialect is a poor language. The noblest of tongues were, at one time, but groups of personal speechways.

When we come to trade languages we encounter frank utilitarian mixtures. Pidgin-English is an amalgam of English and Chinese; *pidgin* is Chinese for English. Beach-la-mar is a lingo of the Western Pacific, compounded chiefly of English

words in native constructions. Mauritius Creole is a pidgin French spoken on the island of Mauritius. Chinook is an American-Indian lingo composed of a vocabulary from French and English and from various Indian tongues.

The trade lingos represent the violent, necessitous establishment of a new norm. It is not impossible, though very unlikely, that any such jargon should become a standard language. English, in the days of Chaucer, was pretty much an Anglo-French lingo, although the mixture took place on a high literary plane. The destiny of any means of communication is not predictable. Too many non-linguistic factors enter into the reckoning.

That which makes for divergence among speakers of the same language may ultimately make for divergence between languages themselves.

One of the great triumphs of linguistic science in the nineteenth century, which is the great century of linguistic research, was the gradual revelation of the manner in which many of the world's languages are related to one another. The work has by no means been completed. Much indeed is known about one vast linguistic family—the Indo-European; even more is known about one of the great subdivisions of the Indo-European family: the Romance languages. The Indo-European classification stands solidly established; there are other groups that require much clarification. Whether, in the absence of inscriptions and documents, this will be achieved, is yet in doubt.

More important than knowing the names of some two thousand languages, a few of them philological mysteries, is a knowledge of the technique that has been used in classifying them.

As languages have certain phonetic predispositions, so they have certain morphological diatheses. In simpler words, just as certain languages seem to avoid certain sounds or sound-combinations, and to prefer others, so do they seem to avoid certain formal devices and to prefer others. What we call

the spirit of a language seems to exercise a choice (unconscious on the part of its speakers) not only of sounds and words but of grammatical structures.

It occurs to almost everybody who has occasion to become conscious of the differences between one language and another that there are resemblances, too. The resemblances may be in the sounds of words, or in the meanings of words, or in the way words are put together. Any one of the newer tongues of Latin origin—French, Italian, Spanish, Rumanian, Provençal, Catalan—betrays, even to one who knows them imperfectly, many points of resemblance to the so-called parent tongue. The various Germanic languages—Danish, Norwegian, Swedish, German, Icelandic—betray likewise many resemblances to each other. The main languages of other parts of the world, such as Chinese and Hindustani in Asia, are surrounded, too, by languages that reveal similar resemblances to each other and to the better-known tongue.

It was easier, in the days before modern linguistics began its series of philological conquests, to mistake the nature and the cause of these various resemblances among groups of related languages. It was, on the other hand, difficult to realize that external resemblance was not a trustworthy guide, and that external difference might often mask a closer relationship than was suspected. The whale does not look like a man, yet the whale is more closely related to man than to other creatures whose natural habitat is the water. For the whale, despite a long, indignant, and unscientific chapter in *Moby Dick,* is a mammal, not a fish.

Languages used to be grouped, first of all, according to the manner in which they treat their words. Chinese, for example, still isolates its words; they are solitary units, without such elements as case-endings, prefixes and suffixes. Chinese, as a result, in the eyes of people speaking such languages as German or even English, "has no grammar." The Chinese cannot say *for God's sake* as we do, or as the Germans do: *um Gottes Willen.* They cannot add an apostrophe and an *s* to show possession or genitive relation; they cannot alter

their word for *God,* as the Germans do, with a standardized genitive ending. They cannot, as Latin can (and English cannot), shift their word order about almost at will, saying *Puer puellam amat* (Boy loves girl), or *Amat puellam puer* or *Puellam amat puer* or *Amat puer puellam.*

The Latin knew at once that *puer,* wherever it might occur in the order of words, was the one performing the action; he knew, from the ending *am* of *puellam,* regardless of where the word stood in the sentence, that she was the receiver of the action; he knew, from the *t* of *amat* that this was a third person singular verb describing the action, and that, wherever it occurred in the statement, it could refer only to the subject, *puer.* The subtleties of Latin word order are hardly exhausted by this exceedingly simple example, but the example suggests an essential difference between a language of the Chinese type and one of the Greek or Latin type.

How does English fare in this respect? *Boy loves girl,* if turned about becomes *Girl loves boy.* The meaning, by a reversal of words, is itself reversed. We do have, however, a slight affinity with the Latin freedom of word order. That is, such a sentence as *I see him* we can reverse to read *Him I see;* there would be no mistaking the sense, but there would be no mistaking the awkwardness or the un-English feeling of such an expression. Inversion used to be more common in poetry than it is to-day; at one time even *Came the dawn* read like poetry rather than like caricature. Inversion, for poets, was a convenience; the practice must have been aided, too, by the fact that formerly we were more under the influence of Latin (whether in writing or in grammatical conceptions) than we are at present.

The isolation of the Chinese word, then, compelled the Chinese to invent means for indicating the relationship of one word to another. This they achieved by adopting a rather rigid word order. Our own is not too flexible, and for similar reasons. Certain Chinese words then lost their original meanings and became auxiliary words—"empty" the Chinese call them—whose function it is to point out further the relation-

ships of the words to the other words in the sentence, and to make clearer the meaning of the word itself. The Chinese, then, by setting aside certain words for these purposes, attained the same ends that Latin reached by using case-endings (*puer,* 'boy,' *pueri,* 'of the boy,' *puero,* 'to the boy,' and so on) and that we attain with such prepositions as *of, by, for, to, with,* and such.

Languages that, like the Chinese, isolate their words, were called *isolating* tongues.

Languages that, like Sanskrit, Latin, Greek, German, and Russian, inflect their nouns and adjectives and pronouns (that is, indicate relationship by different tags or endings) were called *inflecting* tongues, or *flexional. Flexion* is bending or turning; *inflection* is a turn of the voice, or of a word —a variation in pitch (of voice) or in form (of ending).

Languages that, like English and the neo-Latin (Romance) tongues, employ prepositions instead of a regular system of inflected nouns, pronouns and adjectives, are called *analytic.* (Greek, *análysis,* from *analúein,* 'to dissolve,' 'to loosen,' 'to break anything up into its elements.')

Besides these linguistic types there was the *agglutinative* type. (That is, the gluing-together type.) For in certain tongues employing "empty" words, as do the Chinese, the auxiliary word and the main word in time ran together, became fused; the sense of separate words was forgotten. Precisely the same thing has happened in the case of the French ending *ment* and the English ending *-ly,* as we saw in the chapter on grammatical forms.

The standard example of the agglutinative type of language is Turkish; it is a type that stands between the isolational and flexional. The endings, though intimately connected with the main body of the words, are yet plainly distinguishable: *Säv* is 'love'; *säv-di,* 'he loved'; *säv-di-lär,* 'they loved.' If the agglutination goes so far as to form sentence-masses, of which the components are not so readily distinguishable, we have what are termed *polysynthetic* languages, as among the American Indians.

The contemporary method of regarding linguistic types leans away from these hard-and-fast distinctions. For one thing, many languages show, in minor details, all these classifying traits. English is appreciably isolating in much of its word order. It is almost as "grammarless" as Chinese. At the same time, in such forms as *man's, child's* (with the *'s,* sign of the possessive) it is inflectional. In such forms as *humbly* and *simply,* which are composed of the words *humble* and *simple,* plus an ending *-ly,* which was once the independent Anglo-Saxon word *líc* (body), it shows the agglutinative process.

Up to recently we heard much talk of linguistic genealogy: language was like a tree, with a stout trunk representing the parent-tongue, and with lesser tongues branching off from the parent, while newer tongues twigged off from the branches, and so on throughout linguistic history. Botanical metaphors, indeed, have somewhat corrupted linguistic thought. Such words as *root,* for the original form of words, give false impressions of how words developed, just as the image of the tree gives false impressions of how languages developed.

Language could not very well have *begun* with roots. A root, though to us it appears as an elemental simplicity, represents in reality a high type of generalization. Indeed, it is an abstraction of a high order. Although it is unquestionable that root-ideas exist, the existence of primitive roots, from which all words relating to the root have been built up, is questionable. Roots, especially as we imagine them to have been in the dim and perhaps forever inaccessible origins of language, are, like the idea of an original parent-language, a useful fiction.

Bearing in mind such a modified conception of what primitive roots must—or may—have been like, let us examine a small number of the hundreds of Indo-European roots familiar to modern philology and see how they are represented in the later languages.

AK contains the central idea of 'sharpness' and 'quickness.'

Sanskrit *acva* is 'horse'; Greek *akme* is 'edge'; related English words are *acme, acrobat, acute, equine, eager, axe.*

AG suggests 'to drive,' 'urge.' Sanskrit *aj* is 'to drive'; Latin *agere* is 'to conduct' or 'lead'; English relatives are *agony, agent, axis, acre, ache, axle.*

AN is 'to breathe.' Sanskrit *an,* 'to breathe'; Greek *anemos,* 'wind'; Latin *animus,* 'spirit'; English relatives, *anemone, animal, animosity.*

AS is 'to breathe,' 'to be,' 'to live.' Sanskrit *as,* 'to be'; Greek *esmi, eimi,* 'I am'; Latin *sum,* 'I am'; *esse,* 'to be'; English relatives, *absent, present, essence, am, is, are, sooth.*

BHU, 'to grow,' 'become,' 'be,' 'dwell,' 'build.' Sanskrit *bhu,* 'to be'; *bhavana,* 'a dwelling-house'; Latin *fui,* 'I was'; *futurus,* 'about to be'; *tribus,* 'a tribe'; *fetus,* 'offspring'; *fecundus,* 'fruitful'; *felis,* 'a cat' (the fruitful); Anglo-Saxon *beon,* 'to be'; Lithuanian *buda,* 'a booth'; English relatives, *physic, future, fawn, be, boor, by-law.*

GA, 'to beget,' 'produce' (also GAN, KAN). Sanskrit *jan,* 'to beget'; Greek *gignomai,* 'I am born'; *genos,* 'race'; *genesis,* 'origin'; *gune,* 'woman'; Latin *gignere,* 'to beget'; *genus,* 'kind'; *genitor,* 'father'; Old High German *chind,* 'a child'; English relatives, *giant, bigamy, benign, cognate, kin, kith, child, chit, queen.*

GAN, 'to know.' Sanskrit *jna,* 'to know'; Greek *gignoskein,* 'to perceive'; Latin *gnoscere, noscere,* 'to know'; *narrare,* 'to tell'; Anglo-Saxon *cnawan,* 'to know'; English relatives, *gnostic, ignoramus, noble, ken, cunning.*

GIW, 'to live.' Sanskrit *jiv,* 'to live'; Greek *bios,* 'life'; Latin *vivere,* 'to live'; Russian *jit,* 'to live'; Anglo-Saxon *cwic,* 'alive'; English relatives, *biology, vivid, quick.*

I, 'to go.' Sanskrit *i,* 'to go'; Greek *eimi,* 'I go'; Latin *ire,* 'to go'; *ævum,* 'time'; English relatives, *exit, issue, itinerary, perish, sedition.*

KAP, 'to hold,' 'grasp,' 'contain.' Latin *capere,* 'to seize'; Irish *gabhaim,* 'I take'; Gothic *haban,* 'to have'; *hafjan,* 'to lift,' 'heave'; Anglo-Saxon *hafoc,* 'hawk' (i. e., a seizer); *hæfen,*

'a haven'; English relatives, *capacious, head, capital, chapter.*

KAM, 'to love.' Sanskrit *kam,* 'to desire'; Latin *amare* (from *camare?*), 'to love'; English relatives, *enemy, amiable.*

MU, 'to bind,' 'shut,' 'close.' Sanskrit *mu, mav,* 'to bind'; *muka,* 'dumb'; Greek *muein,* 'to close the eyes or mouth'; *musterion,* 'mystery'; Latin *mutus,* 'dumb'; English relatives, *mystic, mystery, mural, munificence, community* (the latter is here considered not as composed of the central idea *unus,* or 'one,' but of *com-mu-nis,* 'a binding together').

PA, 'feed,' 'nourish,' 'protect.' Sanskrit *pa,* 'nourish'; *pitri,* 'father'; Greek *pater,* 'father'; Latin *potens,* 'powerful'; *panis,* 'bread'; *pascere,* 'to feed'; Russian *pitat,* 'nourish'; Anglo-Saxon *foda,* 'food'; English relatives, *possible, palace, feed, fur, foster.*

PU, 'to beget.' Sanskrit *putra,* 'son'; Greek *pōlos,* 'a foal'; Latin *puer,* 'son'; *puella,* 'girl'; *pullus,* 'young of any animal'; English relatives, *puerile, puberty, pedagogue, puppet, pullet, filly.*

SMAR, 'to remember.' Sanskrit *smri,* 'to remember'; Greek *martus,* 'a witness'; Latin *memoria,* 'remembrance'; English relatives, *martyr, remembrance.*

STA, 'to stand' (various forms, such as STAK, STAP, STABH, STAR, STU). Sanskrit *stha,* 'to stand'; Greek *histēmi,* 'I place'; Latin *stare,* 'to stand'; Lithuanian *stoti,* 'to stand'; Anglo-Saxon *standan,* 'to stand'; English relatives, *static, apostasy, stage.*

SWAN, 'to resound.' Sanskrit *svan,* 'to sound'; Latin *sonare,* 'to sound'; English relatives, *sonata, sonnet, person, sonorous, unison.*

TAR, 'to pass over' or 'through,' 'to penetrate.' Sanskrit *tri,* 'to pass over,' 'attain'; Greek *terma,* 'goal'; *telos,* 'end'; Latin *intrare,* 'to enter'; *trans,* 'going through'; *terminus,* 'end'; English relatives, *avatar, talisman, enter, term, trowel, through.*

TARS, 'to be dry,' 'to thirst.' Sanskrit *trish,* 'to thirst'; Greek *tersomai,* 'to become dry'; Latin *torrere,* 'to parch'; *terra* (for

tersa), 'dry ground'; English relatives, *torrid, terrace, toast, terrier, thirst.*

US, 'to burn.' Sanskrit *ush,* 'to burn'; Greek *helios,* 'sun'; Latin *urere,* 'to burn'; *aurora,* 'east'; *aurum,* 'gold'; English relatives, *aphelion, aureate, east, Easter, combustion.*

WARDH, 'to grow,' 'increase.' Sanskrit *vridh,* 'to grow'; *urdhva,* 'erect'; Greek *orthos,* 'erect'; English *orthodox.*

WID, 'to see,' 'to know.' Sanskrit *vid,* 'to know'; *veda,* 'knowledge'; Greek *oida,* 'I know' (i. e., I have seen); *eidolon,* 'image'; Latin *videre,* 'to see'; *visere,* 'to go to see,' (i. e., 'to visit'); Gothic *witan,* 'to know'; English relatives, *history, idol, idea, vision, witch, wise, advice.*

The various developments of the roots in the various languages, of course, are highly complicated matters. The above simplified list is concerned only with suggestive extensions of the roots, and not with the changes in sound and sense that are affected by time and place, or by coalescence with other words or syllables. Thus, to take but one example, it is difficult to see how English 'history' may be connected with the root WID. In Greek, however, *histōr* means 'knowing,' 'a witness'; it comes from an older conjectured form *hidtor.* The Greek rough breathing, represented by *h,* is itself the relic of an ancient sound and letter, the digamma, which looked like our F but sounded like our W.

What we call roots represent the end-products of thousands upon thousands of years of half-articulate, groping, mumbling speech, in which the human mind and tongue must have blundered through a veritable jungle of slothfully emergent conceptions. They stand for an orderliness that later generations established in the welter of speech.

The root TAN, for example, goes back to the Sanskrit; it is at the basis of all our words containing the element *ten* as in *tension, extension, attention, intention, tense* (in the sense of *taut*), and so on to a multitude of other related words. The fundamental idea of the root is that of *stretching, tensing.*

But is it easy to think that such a generalized idea, and such a highly concentrated expression as TAN, could have sprung fully formed from the foreheads of our proto-historic ancestors? Does it not rather represent a late generalization arrived at through countless specific forms of which it may be an abstraction? The aboriginal mind does not work by abstractions; it works with concrete, sensuous, practical instruments.

In much the same way it has been objected that Chinese could not possibly be a primitive language, precisely because its monosyllabic character is too plainly the result of a long evolution. We do not begin with such simplicities as monosyllabic structures; we struggle to them, through the confusion of multiplicity. Jespersen mentions a number of studies that reveal, in ancient Chinese, the presence of case-endings; he cites A. Conrady as demonstrating that many of the Chinese tone relations (as well as tones in languages related to Chinese) "find their explanation in the previous existence of prefixes which are now extinct, but which can still be pointed out in Tibetan." If this be so, then prehistoric Chinese was not monosyllabic, and was not isolational, and the old classification of languages receives yet another setback.[1]

There are metaphors even from medicine and pathology. Such words as *decay* or *degeneration,* or *therapeutic,* do not give a proper idea of what takes place when words alter for the worse or for the better.

To replace the linguistic genealogy we have now a "wave"-theory of language, which, while more in accord with the known facts of linguistic evolution, may introduce misunderstandings of its own. Schleicher's genealogical tree and Schmidt's waves are over-simplifications. Languages do evolve from one another, but not as branches from trunks. The relative size of trunk and twig do not indicate relative importance; the trunk may be older, but that is all. The relative directions of trunk and branch and twig do not properly indicate historic, cultural, racial or economic relationship.

[1] Otto Jespersen, *Language, Its Nature, Development, and Origin* (Henry Holt and Co., 1934), p. 373.

The "wave"-theory is better; it represents dialects and languages as forces rippling over the ocean of language—meeting at one point, parting at another, interpenetrating in various proportions and through various areas. There is a "wave"-theory of culture, too, since languages and cultures, if not identical, are related of necessity. The one implies the other.

It is an error to establish false identities between language and race, or between language and specific cultures. We are no longer sure as to what a race is in the first place; and certainly a "pure" race exists only in dubious ethnologies. The very etymology of the word *race,* in the ethnological sense, is uncertain. Many Negroes, Jews, Italians, Poles, and other non-English peoples speak English now as their only tongue. A "pure" language, at this stage of the world's history, is as dubious as a "pure" race. Equally dubious, for that matter, is a "pure" culture. It may be instructive, too, that all renaissances seem to point to, and to be preceded by, a blending of cultures.

§ 2. INDO-EUROPEAN—ROMANCE PHILOLOGY

Just where language began is as uncertain as the precise location of the Garden of Eden. No language spoken to-day, no language of which we have any sort of record, can suggest what prehistoric language was like. Prehistoric language is a conjectural entity. We try to work our way back from the known to the unknown.

The oldest of languages now in existence is, from any scientific point of view, quite young. We can point to the Romance languages and say, definitely, these tongues are various developments of the Latin that was spoken by the people. We can point to Latin and say, this is a sister-tongue of Greek and Sanskrit. We cannot point to any *definite, non-conjectural* language that has the same relation to Greek, Sanskrit and Latin as Latin itself has to the Romance tongues.

The Indo-European languages are so called because the

original tongue from which they evolved is supposed to have been spoken over an area that covers the present general territories of Indian Asia and Europe. Formerly there were terms such as Indo-German and Aryan. The first of these gives too much prominence to the German group; the latter, to-day even more than formerly, is a confused term lacking all linguistic significance and possessing but little racial validity.

In grouping languages, scientists examine closely the vocabulary, the phonetic correspondences, and the grammatical or morphological correspondences. The closer the vocabulary of one tongue seems to be to that of another, the greater the similarity in the phonetic "laws" by which they seem to have changed their pronunciations of words, and, especially, the greater the resemblance between their grammatical structure, the more likely it is that they are related.

What, then, is the nature of that relationship? A language may have evolved *from* another; also, it may have evolved *with* another. The Romance languages evolved *from* Latin. The Teutonic languages evolved *from* a Germanic ancestor. But how about Latin and Germanic? They evolved *with* each other from an earlier, common ancestral tongue.

It is the same, of course, with the words that make up languages. It is wrong, for example, to say that English *toll* is derived from German *Zoll*. To *derive* means to *flow from*. *Toll* and *Zoll* are *cognates, congeners,* not derivatives. They are *akin*. They are, so to say, cousin words, not sisters. The one does not come *from* the other, but *with* the other, from a common source.

Sanskrit, Greek, Latin, and a number of other tongues, come from a common Indo-European source. They are not derived from one another; they are allied, cognate.

The Romance languages, each of which is derived from Latin, are, with respect to each of themselves, cognate. The relationships are comparable to, but not identical with, *direct* (in the first case) and *collateral* descent (in the second case) in genealogy.

It will help to fix certain details of the Indo-European system in our minds if we locate the position of English in that system.

The word *English* is from Anglo-Saxon *Englisc,* in turn from *Engle, Angle,* the names of a tribe of Germans from Schleswig. English, then, is of the Germanic branch of the Indo-European tongues.

The Germanic, or Teutonic, subfamily has three branches: the East, the Scandinavian, and the West. The East branch comprises Gothic or Mæso-Gothic; the Scandinavian branch comprises Old Norse, or Old Icelandic, Icelandic, Swedish, Danish, and Norwegian; the West branch, which has two divisions, High and Low, is made up as follows: (High) Old High German, Middle High German, modern German; (Low) Old Saxon, Old Low Frankish, Low German, Dutch, Flemish, Frisian, Anglo-Saxon, Middle English, and English.

English, then, is a Germanic tongue, of the West branch, and of the Low division of that branch.

The tendency of the Indo-European scholars, as contrasted with the Romance scholars, has been to place perhaps too great emphasis upon the classical, the dead languages. For this there was good reason, since the circumstances attending the discovery of Sanskrit by Western scholarship dramatized the existence of ancient texts and offered the promise of important revelations as to the antiquity of language.

The tendency of the Romance scholars has been in the opposite direction. They knew, from the first, just where the Romance languages had come from. Their attention became centered upon the dailiness, so to speak, rather than the antiquity, of language. Before their very ears the transformation of living languages was going on, and from this living structure they could learn things about speech that are inaccessible to those who deal in dead languages. Romance philology possesses the most complete data available about the evolution of a group of tongues from a known linguistic focus.

The latest estimate of the number of languages in the world, as made by the French Academy and published in June, 1938, gives the figure 2,796.

Though there are differences as to the precise classification of a particular tongue, the general lines are quite clear. There are, on the one hand, the Indo-European languages, and, on the other, the non-Indo-European languages. Of these, there are the living tongues and the dead. Extinct Indo-European tongues, for example, are the Phrygian, the Tokharian, the Hittite; extinct non-Indo-European tongues are the Etruscan, the Van, the Mitanni, the Sumerian.

The Indo-European is the most important of the linguistic families in the world. Linguistic families are divided into subfamilies, subfamilies into branches, branches into groups. Any specific tongue, then, has its place in a well-defined system of relationships, just as—in a different scheme of arrangement—a city belongs to a county, a county to a state, a state to a nation.

The languages of the Indo-European family have been grouped also into the *Centum* and *Satem* divisions—that is, into those employing for the word 'hundred' a term based either upon *centum* or *satem*. The Centum division is generally Western; the Satem division is generally Eastern. This grouping does not appear to possess any great linguistic importance, however.

The Centum division includes such subfamilies as the Hellenic, the Italic, the Celtic, the Teutonic (or Germanic).

The Satem division includes such subfamilies as the Indo-Iranian, the Anatolic, the Balto-Slavic.

Each of these subfamilies, in turn, includes finer classifications. Under Hellenic come all the languages related to classical Greek; under Italic come all the languages related to classical Latin; under Teutonic come all the languages related to German.

In the same way, under Indo-Iranian (subfamily) come Indic and Iranian (branches); of the Indic branch, Sanskritic

is one of the chief groups; of the Sanskritic group, Sanskrit, Pali and Prakrit are among the chief representatives.

The Romance languages bear the same relationship to Latin that Sanskrit, Pali, Prakrit and Romany (the Gypsy language) bear to the Sanskritic group.

A tabular representation will help to make clear the interrelationships as they apply to representative tongues in the Indo-European family.

INDO-EUROPEAN

Satem Division (Eastern)	Centum Division (Eastern)
Indo-Iranian	Hellenic
Anatolic	Italic
Balto-Slavic	Celtic
	Teutonic

So much, in very schematic form, for the general divisions. Now, let us take, of the Satem division, the Indo-Iranian representative; and, of the Centum division, the Hellenic representative.

INDO-IRANIAN	HELLENIC
Indic	Greek
Sanskritic	——
Sanskrit	Ionic
Pali	Attic
Prakrit	Doric
	Aeolic

Let us take, as another pair from the Centum and Satem divisions, Balto-Slavic (satem) and Italic (centum):

BALTO-SLAVIC	ITALIC
Baltic (Lettic)	Osce-Umbrian
Slavic	Sabellian
Russian	Latinian
Ukrainian	Latin
Polish	French
Czecho-Slovakian	Italian
	Spanish
	Portuguese, etc.

The further to the right one goes in these simplified tabulations, the more specific becomes the classification. Thus, Portuguese is one of the languages developed from Latin, which itself was one of the tongues developed from the Italic group. Thus, Russian is one of the tongues developed from the Balto-Slavic, of which Baltic and Slavic are representatives.

Of the non-Indo-European languages there are many representatives, variously arranged. It would be too confusing to attempt a grouping that corresponds to the clear-cut classification of the Indo-European languages. It will be best to list a number of distinct groups.

Finno-Ugrian (Finnish, Lappish, Hungarian, Cheremissian)
Samoyed (Uralian)
Yenisei
Altaic (Turkish, Chuvash, Mongolian)
Caucasian
Semitic-Hamitic (Assyrian, Aramaic, Phœnician, Hebrew, Arabic, Somali, Egyptian, Coptic)
Basque (Iberian)
Dravidian
Austro-Asiatic (Munda, Annamese, Mon-Khmer)
Indo-Chinese (Tibetan, Chinese)
Japanese
Korean
Ainu, Giliak
Kamchatka
Yukaghir
Aleut, Eskimo
American Indian
Bantu (Herero, Kaffir)
Australian

I need hardly add that these names must remain, for the average reader—and not for him alone—names only. They are intended to suggest the diversity of human tongues and the complexity of the problems of classification.[2]

[2] To those whose linguistic curiosity demands further detail I would suggest, as one of the most simple and yet scientific descriptions of the various languages, their peculiarities, and the regions where they are spoken, W. L. Graff's

Is it possible that in some way as yet not apparent to investigation all these grand linguistic divisions are linked to some prehistoric speech—that all languages ultimately come from a single linguistic focus? All that may be said at the moment is this: though such an interrelationship is not impossible, it does not seem, in the light of present knowledge, probable.

§ 3. LANGUAGE, RACE, AND NATIONALITY

A language easily becomes a flag, used for purposes of waving. Wars have been fought, on the battlefield and off, over language and the ideals that are symbolized by a particular language or dialect. A language, however humble, is so closely interwoven with the very life of the speaker that to oppress the one is to oppress the other. Wars and revolutions almost inevitably affect the linguistic balance of the world, as do national revindications.

Observe, for a few moments, the changing linguistic map of Europe and Asia, as it appears to a contemporary onlooker.

In what was formerly known as Russia, which exercised a rather strict watchfulness over the minor language-groups, there is now a complete freedom of language and dialect. The lesser nationalities that comprise the Union of Socialist Soviet Republics are urged, indeed, to develop their linguistic individualities. The linguistic freedom symbolizes a new ideal of social and economic freedom, just as the former restrictions symbolized an old ideal of submission. As one result of the new ideals, Yiddish, once upon a time a tongue frowned upon officially, blossoms anew under Soviet encouragement. At the same time, anti-Semitism is legislated out of the Republic.

See now the irony of history. In Palestine, whither so many persecuted Jews have gone to seek a haven against homelessness and dictatorships, the official language of the restored Zion is Hebrew. To the adherents of a new Jewish nation-

Language and Languages (D. Appleton and Co., 1932). See, in this work, Chapters X and XI.

alism, Hebrew, the language of the ancient glories, is the language of the restoration. Yiddish, the natural language of so many of the immigrants, is frowned upon officially. Noted Jewish authors have been prevented by student demonstrations from making public addresses in Yiddish. Yiddish folk-songs are tolerated—in the privacy of the home.

At the very historic moment when Yiddish, in the vast regions of Russia, has been freed from its shackles, it is largely proscribed in the new homeland of the Jews, by Jews! Anywhere else, this would be called anti-Semitism. It is, of course, nothing of the kind. It is a powerful, however much mistaken, expression of a nationalistic ideal.

It is mistaken because it fails to make the necessary distinction between what is said and the language that says it. A linguistic dictatorship, however benign, is a dictatorship nevertheless. It is a question whether absolute uniformity of language is desirable in any country that is made up of heterogeneous elements.

In recent years, under the stress of a hypertrophied nationalism, both Italy and Germany have devoted attention to an enforced "purification" of their respective languages. In Italy prizes have been offered for words that should embody certain ideas in pure Latin elements rather than in the foreign roots that at present reign. In Germany an even more intensive campaign has been waged for the "deportation" of the foreign elements in German terms. For example, according to a report issued by the Associated Press on November 8, 1937, the term *Relativitäts-theorie* is to be replaced by *Bezüglichkeitsanschauungsgesetze;* instead of *automobile,* they are to say *Kraft-wagen;* instead of *Opernglas* ('opera-glass,' with its Latin *opera*) they are to say *Nah-glas,* or, literally translated, 'near-glass'—the glass that brings objects near. A booklet issued to acquaint Germans with the new substitutions listed some seven hundred words thus restored to German citizenship.

The booklet was really not so new as it may have appeared to the reporters and to most of the Germans themselves.

"Some thirty years ago," wrote DeQuincey in his essay upon *Language,* which was printed in the early 1850's, "the Prussian government was said to have introduced into the public service a dictionary which rejected all words not purely vernacular. Such a word, for instance, as *Philosophie* was not admissible; the indigenous *Weltweisheit* was held to be not only sufficient, which it really is, but exclusively legitimate."

It is easy to see what would happen to modern languages if they should all adopt a similar verbal chauvinism. English, like German, is basically a Teutonic tongue. It is saturated with Latin and Greek; it contains not only entire words that come from these languages, but thousands of words into which Latin or Greek elements have entered ineradicably. If, by legal fiat, the speakers of English were to be compelled to learn new formations for such terms as *philosophy* and *telegraph* and *alibi* and *piano* and what not else, there would be little to do but return to the noun-structure of Anglo-Saxon. And why stop at the nouns? Or at Anglo-Saxon?

This atavistic etymology would be, in a sense, a futile attempt to reverse the history and the very rationale of language. We have seen that the same spirit of exclusivism in language may be carried to the extreme of favoring only regional pronunciations. The bitter logic of the attitude, if carried to the end, would lead to the spectacle of a lone individual talking suspiciously to himself.

Language, from its very nature, leads outward. It is communication, not exclusivism. If, in the course of history, certain words have acquired an international currency, to renationalize them is a disservice to the finer purposes of world-communication.

Particularly does this happen to be true of the sciences and the arts. There has been a movement afoot for many years to abolish or neutralize the foreign directions in musical scores. American composers have felt, somehow, more American when, instead of writing *vivace ma non troppo,* they set down, *lively, but not too much.* Certainly a man has the right to use his own language when he gives directions for the playing

of his own music. On the other hand, musical directions have acquired international significance. Music, from its very nature, is more international than language. It is the hope of the American composer that his music will be played not only in the United States, but in other countries. In those other countries the Italian directions will be understood at once, since Italian has been associated, historically, with the development of music. If, in a mistaken ardor of nationalism, an American composer were to insist that only his American directions appear upon his music, they would have to be translated anew for every new country in which the music was played. This would be, in the face of the internationality of the Italian terms, manifestly a rather stupid procedure. The renationalization of terms already international—words such as *philosophy* and *automobile*—introduces into language a like obstruction to ready and wide understanding.

Languages break up before our very eyes and ears. The natural tendency is to resist the evidence. Change of any kind is a challenge to established habit.

Is there, for example, a Spanish-American language, as distinguished from Spanish, or, as some still call it, Castilian?

Is there a Brazilian language, as distinguished from Portuguese?

Is there an American, or United States, language, as distinguished from English?

Let us first pause upon that adjective *American,* which is rather chameleon-like in meaning. To us of the North, it signifies that which pertains to or belongs to the United States. Strictly speaking, however, Canada is a part of America, and so are all the republics to our south. *Americano,* below the Rio Grande, stands for any inhabitant of Central or South America. We have not yet, in our tongue, truly acclimated such an expression as *United-Stateser.* Some such designation, none the less, would have its uses, especially with the prospect of increased commercial and intellectual traffic between our country and the Southern republics. There is, inherent in

the term *American,* a beautiful, if unrealized, internationality. We are all Americans, from Alaska to Tierra del Fuego.

It is worth while also to indicate the carelessness behind our too easy designation of Spanish-Americans as Spaniards. It is precisely as if a Spanish-American were to call a New Yorker or an Oklahoman an Englishman. The Spanish-Americans and the Brazilians call us North Americans; this, to be sure, is an unintended slight upon the Canadians. Many of us still fail to remember that the language of Brazil is basically Portuguese, not Spanish. And, to make the confusion even more interesting, the Americans to our South have not yet made up their minds as to just what they call themselves. For years, a controversy has been going on around the term *Latin-American.* There are many who object to it on the score that it leaves out of consideration the contribution of the Negro and the Indian and the other non-Latin races to the upbuilding of the southern continent. One substitute is *Ibero-American,* which confines the credit to Spain and Portugal, whereas *Latin-American* includes the French and Italians. The discussion naturally overflows the boundaries of linguistic science into the fields of national pride.

"You change sky," wrote Horace, "but not soul." It is, for the individual, a profound observation. For the race it is not so true, especially in the historical sense. In any case, when you change sky you inevitably change vocabulary. The conquistadors came upon a vast new territory, thousands of miles from their homes, containing not only new tribes of mankind, but new vegetation, new natural phenomena, creatures and objects for which their language had no words. The conquerors took the words for the native objects from the native peoples. It was the same in Brazil; it was the same in our own country during the days of conquest and colonization. To be sure, the number of such words was not enough to affect the dictionary radically; the words had no influence upon the structure of the language, only upon its vocabulary. They added new colors to the linguistic palette, however. It was natural that, shortly, there should be a discernible lexical dif-

ference between the Spanish and the Portuguese of the New World and that of the Old.

This would not be sufficient to create, between the Old World and the New, a chasm of misunderstanding; any more than if you or I do not know the name of a North American bird, and find it mentioned in a text or a conversation, our minor ignorance creates a chasm of misunderstanding. Later, when the conditions of living in the new continent induced subtle changes of mental and physical habit, the changes would reflect themselves subtly in the speech of the conquering Spaniards.

One should be careful, however, about attributing to the new climate or conditions the new elements of speech. Spanish-American, for example, is phonetically distinguishable in certain respects from pure Castilian. The *ll* is not pronounced *ly,* but *y*. *Caballero* in Spain, by cultured persons is pronounced *cabalyero,* the *ll* sounding much as *lli* does in *William*. In Spanish-American *caballero* is pronounced more like *cabayero*. The *c* before *e* or *i,* in Castilian, is sounded like our hard *th*. One hundred is *ciento* (*thiento*). In Spanish-American such *c's* are pronounced like our *s* (*siento*). These are the more noticeable among the divergences. Yet they, and other variations, *are all to be found in dialects of Castilian that are spoken to this day on the territory of Spain itself.*

Naturally, with a great deal of intermarriage going on from the earliest days of the Conquest, there would be changes of pronunciation caused by the change in physical structure. Luis G. Urbina, one of the most engaging of Mexico's essayists, has written [3] that "the Spanish language is the sole form that has given us, and will give, a literary personality in the universe of ideas." Yet the very idea of transplantation connotes modification. Urbina beholds a Mexican type that is the result of the mixture between conquistador and native. According to him, anthropological investigation shows that the bodily structure of the Mexican differs from the Spanish type as much as from that of the primitive American. "Physiologically

[3] Luis G. Urbina, *La vida literaria de Mexico,* Madrid, 1917.

we are neither one nor the other; we are a well-differentiated ethnic type, partaking of the nature of both progenitory races."

Urbina finds that there has been a psychological change commensurate with the physiological—a change to be noticed not only in literature, but in all other spiritual pursuits. Mexico's dowry to the union has been a pervasive melancholy. "To the Sancho-Panzan jollity and the Quixotic madness there is added in our hearts the sadness of the Indian, the ancestral submissiveness of the subject, the gentleness of the aborigine. And if we are Mexicans in life, we are Mexicans in speech, in dreams and song."

Mexicans in speech . . . This is true if the reference is to enunciation; it is highly questionable if the reference is to language proper. It cannot be said with scientific accuracy that there is a Mexican language with a Spanish base as distinct from a Castilian language. Nor can it be said that there is, as distinct from Castilian, a Spanish-American language. Rémy de Gourmont, one of the few intelligent Europeans to interest himself in the rich and as yet unjustly neglected culture of Spanish- and Portuguese-America, suggested more than a quarter of a century ago the term *neo-español* (neo-Spanish) for the language spoken in Central and most of South America. The term itself was, and still is, somewhat rash. It suggests a structural difference between the parent tongue and the offspring that does not really exist. It does recognize, however, the innovating power of a change in environment and outlook. It is possible that he spoke rather too soon than too thoughtlessly.

It is easy to see, then, that the linguistic problems of Mexico, as related to the language of the conquerors, are repeated in each country that was subjected to the rule of Spain. It is likewise easy to see that Brazil has a similar problem with reference to the parent tongue, Portuguese. Throughout Spanish- and Portuguese-America there has been a mixture of native and European that surpasses in extent and catholicity anything that we know in our nation. Color lines, to our south, have been obliterated not by law, not by idealistic toleration,

but by the unanswerable intermingling of the flesh. What has, according to Urbina, happened to the skin, the soul, the speech of the Mexicans, has happened in the respective cases of all the other countries.

Brazil has its linguistic idiosyncracies: the Portuguese nasals there lose something of their twang; final *o's* are not so definitely *u* in sound as they are in standard, Lisbonese pronunciation; final *s's* are not palatalized, and sound, therefore, more like our *s* than like *sh*. These changes, however, are not attributable solely to the new land; they are, like the variations in Castilian as spoken in Spanish-America, to be found in dialects of the peninsula.

In this respect it is interesting to consider our own Negro dialects with their peculiarities that seem so definitely and characteristically African in origin. The Negro dialect of American English *is far more American than Negro; indeed, it is older than American English, going back to the English of England.*

Negro dialect, in the United States, is more exactly described as an English dialect spoken by the Negro. That dialect is predominantly the one that was spoken in Southern and Southwestern England at the time of our oldest settlements in Virginia and South Carolina. It is from this dialect that the broad *a* comes, as well as the suppressed *r*. Such supposedly Negro pronunciations as *haid* and *daid* for *head* and *dead* are to be found in Yorkshire, Lancashire, Northampton, Norfolk, Suffolk, Kent, Somerset, and Devonshire. *Git* for *get* is to be heard all over England and in some parts of Ireland. Dropped *g's,* as in *runnin', walkin',* and *goin',* are to be heard wherever "white" English is spoken. *R's* are dropped in New England as well as by the Negro of the South. The transformation of *th's* into *d's* (*dey* for *they*), the change of *w* to *v* (as in *vine* for *wine*) is to be found in the Kentish dialect.

It is the same with Negro grammar. Errors in the use of singular and plural nouns (*one oxen, five ox*); omission of the genitive sign (*my wife house, Brer Rabbit tail*); errors in com-

parison of adjectives (*worser, worstest, more better, morest, mostest*); confusion of pronouns (*him an' me, him told me*); errors in verb endings and tense (*he run, I seen*)—these are all to be discovered in the dialects of England and Scotland.

Like most dialects, the Negro speech preserves more than one word that has disappeared from the standard language. *Ax* for *ask,* far from being a Negroism, was good English in the days of Chaucer. *Tote,* to carry, is English. So is *start-naked,* for *stark-naked;* the corruption, indeed, is not *start-naked* but *stark-naked.* Anglo-Saxon *steort-naked,* literally translated, is *tail-naked.* "Scratch a Negro idiom," writes Mr. Guy B. Johnson, "and nine times out of ten you find an English dialect phrase." In the same way, scratch a supposed Negro corruption of pronunciation (*ballet* for *ballad, gin* for *given, sparrowgrass* for *asparagus, argify* for *argue*) and you find an English mispronunciation. "Even a hasty examination of the *English Dialect Dictionary,*" observes the same writer, "will show that practically every word of this kind should be attributed to our English forbears rather than to Negro vocal economizing. In fact, it is extremely doubtful whether there is a single word of more than individual or local importance which the Negro has coined by corrupting English words." [4]

It would appear, then, that the chief contribution of the Negro to American speech is the peculiarity of his vocal apparatus: the quality of his voice, its resonance, its pitch, its speech-melody. It is easy, when hearing one's own verbal corruptions from the mouth of another, especially when that other is differentiated from oneself by color, physical trait,

[4] The foregoing section upon Negro-English has been condensed from a most interesting article by Mr. Guy B. Johnson in *Folk-Say,* 1930, *A Regional Miscellany* issued by the University of Oklahoma Press, under the editorship of B. A. Botkin. See pp. 346–358.

Striking proof of Mr. Johnson's case is afforded by consulting, for example, the Bible as printed in the dialect of Sussex. The following passages from the First Epistle of St. John look, to American eyes, like a Negro caricature:

"It be about what had been from de beginning, what we have heard, what we see'd, and our very own hands have touched of de VERY BE of LIFE . . . which was wid de Fadir and was showed to us. . . . Here be de message dat we learned from Him and maak clear to you . . ." (Chapter I). From the 1009 languages represented in the collection of the Bible House.

and vocal sound, to attribute the corruption to the corrupted rather than to the corrupter.

The Negro has, on the other hand, made certain definite contributions to the folk imagination, to the national psychology. As the indigenous Mexican and the Indian generally, throughout Spanish- and Portuguese-America, have altered the enunciation of the new tongue, and added a certain touch of gentle melancholy to the psychology of the new race, the Negro in the United States has become a symbol of uninhibited primitivity, of a passion that the white hesitates to express in his own person. The so-called "coon" song, the minstrel ditty, the later jazz developments, whether as words or as music, represent a freedom in which the Negro serves as a mask for the white. It is a phenomenon that is not known in any other country, especially in the phase that it has assumed as a national industry. The true aborigine of this country, the Indian, has not entered one-tenth so deeply into the national psychology as has the Negro. The Negro has taken our words, he has taken our music and returned it in the form of his spirituals and his less spiritual songs; he has become, as I have said, a black mask behind which we can sing, with less self-consciousness and less self-restraint, those simple passions that we find it difficult to sing in our own persons.

What is true, linguistically, of the Negro is more or less true of all other foreign elements (it would be more exact to say non-English elements) in the United States. The nature of the interrelationship between the various racial factors often determines the nature of the linguistic interchange. The Jews, for example, especially in the city of New York, have been intimately a part of the needle and garment industry. As a result, many of their native expressions, and some of their speech-melodies, have become almost an integral part of the English spoken in that zone of the country.

Gentile New Yorkers, especially if they do business with Jewish clothing-manufacturers, know that *mishugah* means 'crazy'; that *mazumen* means 'money,' preferably cash; that to *shmoos* is 'to chat'; that *mamzer* is 'bastard'; that a *shlemiel*

is a poor fellow who is at once helpless and hapless; that a *shnorrer* is 'a begging soul'; that *gefillte fish* is 'stuffed fish'; that a *shadkhen* is a 'match-maker'; that *mazel tov* means 'good luck,' and is used as an expression of congratulation; that *matza* is the unleavened bread eaten during Passover; that *kosher* means ritually eatable and that *tref* means ritually uneatable; that *Yom Kippur* is the Day of Atonement and *Rosh Hashona* the New Year's Day.

Is this corruption? Or is it, rather, the way in which language is broken down and built up—a linguistic process vaguely analogous to bodily metabolism? *Webster's New International Dictionary* recognizes *mamzer* in its true Hebrew (and Yiddish) meaning: that of 'bastard.' Yet it marks the word obsolete. Mr. Mencken, in *The American Language,* knows better. Each is, however, right. In *Webster's,* the word is dealt with as a word introduced into English in an old version of Deuteronomy; the *Oxford Dictionary* lists the word as appearing in the Vulgate, Deuteronomy, XXIII, 2. It was taken over bodily from the Hebrew by Late Latin. As Mencken lists it, however, it comes into American English *from the Yiddish, not the Hebrew;* and *from colloquial language, not the Scriptures.* The word has thus come twice into the language.

We may sum up the various implications of this discussion by saying that, between the languages spoken respectively in England, Spain, and Portugal, and those now spoken in the United States, Spanish-America, and Brazil, respectively, a decided divergence of pronunciation, vocabulary, and grammar has set in. It is of such separation and such divergences that new languages are born.

Whether there is a truly United States *literature,* as distinguished from English; whether there is a truly Spanish- or Portuguese-American literature, as distinguished respectively from Spanish and Portuguese letters, is less debatable than the existence of separate Brazilian, United States, and Spanish-American languages. It depends, of course, upon how literature is defined; certainly the differences between cultures

upon both sides of the Atlantic are even more striking. In any case, the lines of literature and of culture in general are not coincident with, however roughly parallel to, the lines of language.

Nor are we to make snap deductions as to the culture of a people from the type of its linguistic development.

An example of unscientific thinking that looks, at first blush, imposingly scientific, is to be found in Mr. Walter B. Pitkin's voluminous opus entitled *A Short Introduction to the History of Human Stupidity*. That the evidences of human stupidity should be imbedded in language is only too natural; language is the product of the human beings who employ it. By that same token, the evidences of human genius that are likewise to be found in language—in its construction no less than in the uses to which it is put—are to be credited to those same human beings.

Language, finds Mr. Pitkin, in italics, must represent mentality much more fully than has generally been supposed. Linguists have always supposed that such representation, though hardly constituting an identity between thought and speech, was great. Like all who have approached the study of semantics, Mr. Pitkin is amazed at the general vagueness of meanings in the popular mind, at the carelessness with which words are used, and at the inefficiency with which students of high-school grade employ their native tongue. "Their first years fail to establish shape, precise distinctions in meaning; so their basic vocabulary is infirm and therefore cannot serve well in carrying the vast superstructure of language. This circumstance I regard as the most significant, not alone in education, but in the entire management of human affairs."

So far, in his argument, there is much to give pause to teacher and student alike. He then goes on to contrast the Chinese and the Bantu languages from the point of view of their respective grammars, and proves, to his own satisfaction, that each shows a form of racial stupidity.

He comes to the conclusion, based upon the lack of grammar in Chinese, that the Chinese language "calmly ignores

the listener and the reader." Bantu, on the other hand, has too much grammar. It is repetitious; it carries its grammatical agreement to such lengths that almost every word in the sentence must carry an identifying affix. So that, to translate literally an archaic form meaning, "They are bad people who kill; we fear them," we get, "*They* these–*they*-person *they*-bad *they*-who-kill we-*them*-fear."

"I regard it as a fair inference," declares Mr. Pitkin, "that any language built on the Bantu pattern, namely, with the pronominal prefix as the basis of concord, is the product of a mind that integrates poorly, and cannot carry a moderately complex proposition in thought from moment to moment."

The Chinese language ignores the reader and listener; the Bantu, it seems, pays too much attention to him.

Let us see. Can Mr. Pitkin have fallen into a familiar fallacy—that of taking one's own language as the norm for all others? Does he "calmly ignore the reader and listener" of all other tongues and assume that English grammar is the only grammar, and that the English or modern mentality is the only way of approaching linguistic method? In Chinese ancestor worship he finds "profound social stupidity," linking this by no means exclusively Chinese attribute to a national individualism that is to be deduced from the monosyllabic language. (Recent studies, by the way, show that Chinese was not originally monosyllabic.)

Can there be another fallacy in this reasoning? If clumsy linguistic contrivances are enough to stigmatize a people as stupid, there is no people on earth that is exempt from the charge. We revolve in a circle: a stupid people produces a stupid language, and the same stupidity produces imperfect use of the language, which in turn produces greater stupidity in the people—and so on, to confusion worse confounded.

Much wisdom and beauty have been created in the Chinese tongue. No doubt, even the Bantus have their sages and philosophers. If this has been accomplished despite the difficulties offered by language, so much the less stupid are they who have hurdled the difficulties. A wise diplomat once said

that you cannot indict a nation. Strangely enough, the gifted individual triumphs over the limitations of his linguistic medium; it is by such triumphs that the medium is rendered more plastic. One of the tests of a language is its power to convey abstractions; this appears to have been done with lasting skill by the Chinese classical writers. It is simply not possible to make an equation between the structure of a language and the expressiveness of the same language.

As for the excess of pronominal prefixes and therefore of concord (or agreement, as it is more frequently called), what about the Greek and Latin tongues, which Mr. Pitkin evidently regards as the product of superior minds? What is to be said—employing the facile, fallacious, Pitkin technique—of a language that is so primitive in psychological basis that it endows inanimate objects with gender, attributing to them a masculine or a feminine condition? Is not such animism, such anthropomorphism, even lower in the category of civilization than "stubborn ancestor worship"? Did not the Greeks and Latins, by the way, have a rather stubborn ancestor and godworship of their own, without thereby corrupting their polysyllabic tongues into monosyllabic manifestations of individualism?

How about the concord of the Greek and Latin sentences, in which every noun must carry a label to show its sex, and in which every qualifying adjective must bear a label showing that it agrees sexually with the noun that it qualifies? Does Mr. Pitkin believe that for a Latin commoner the classical language of Latium was any easier to speak or read or listen to than is the literary form of Chinese for the Chinese in the street? Is it not possible for a language to be too grammatical as well as insufficiently so?

The modern view, held also by some of the early missionaries to China, is that "Chinese appeared to be as admirable for the superabundant richness of its vocabulary as for the conciseness of its literary style." [5]

[5] *Encyclopædia Britannica,* 14th edition, Vol. V, p. 570.

It is better, in discussing languages, to have some knowledge of the languages one is discussing.

Perhaps too much has been written about the superiority of this language to that. Too often the opinions have been dictated by some emotion less disinterested than that of linguistic research. Formerly, under the spell of rich Sanskrit forms (rich, or perhaps only plentiful, such as the one hundred and fifty forms of the Basque verb for *have, has, had*) languages were appraised for the plenitude of their flexions.

Jespersen, with his accustomed wisdom, dismisses the assumption that grammatical construction and high civilization have necessarily any connection. He points out that Lithuanian preserves almost the same grammatical system that is to be found in old Sanskrit, "yet no one would assert that the culture of Lithuanian peasants is higher than that of Shakespeare, whose language has lost an enormous amount of the old flexions. Culture and language must be appraised separately, each on its own merits and independently of the other." [6]

In the same way it may be shown that Ethiopian is nearest of all Semitic tongues to the proto-Semitic from which stem Arabic, Hebrew, Syriac, and Babylonian. Yet what is the culture of Ethiopia to that of the later Semitic peoples?

Suppose, as a criterion of national intelligence, we were to take orthography? Where would English, with its stupid spelling, emerge?

The attempts to recreate the culture of a people from the evidence of words present in or absent from the language that has come down to us is equally open to fallacy. Oertel has pointed out [7] that "prehistoric and historic nations may be poor in color names without failing to distinguish color. When Cicero (De Orat., II, 4, 17), from the lack of a Greek equivalent for the Latin *ineptus,* concludes that the Greeks

[6] Otto Jespersen, *Language, Its Nature, Development, and Origin* (Henry Holt and Co., 1934), p. 78.
[7] *Ibid.,* p. 132.

lacked an appreciation of this quality . . . he commits a frequent error."

Similarly, we used to be told in school that the home life of the French left much to be desired; in fact, how could it be otherwise among a people who had no word for *home?* For the answer, let us look to the French homes, not to the French dictionary. The Yiddish writer, Peretz, one of the most interesting of nineteenth-century literary personalities, once complained that the Jews (that is, those who use Yiddish as their native tongue) lack a word for *love.* This was, for all Peretz's eminence as a poet and a distinguished prosateur, doubly unfortunate. Yiddish is a development of Middle High German; as such, it contains a large preponderance of German words, among which *Liebe,* meaning 'love,' belongs by as much right as any other essential word of Teutonic origin. Would Peretz have thought of saying that Jews lacked existence because they had no specially developed word for *to be,* and used *sein,* just as the Germans do?

Let us suppose, however, that Yiddish really lacked a word for love, instead of—as actually—being able to draw, for the different aspects of love, upon Hebrew, German, and even Russian. Would this mean that Jews never lusted, never fell in love, never married? Once again, we must look to life, not to the dictionary, for the answer.

What Peretz might have had in mind, and what mistaken teachers might have had in mind when discussing the alleged French lack of a word for *home,* is this: words represent a focus of interest; we name those things that have a special appeal for us; for that which interests us most deeply we find definitive description. Even this, however, may enclose a fallacy. For words are saturated with connotation. Certainly *Liebe* in Yiddish may signify a different nuance of sexual passion from that suggested by the German word *Liebe.* In English, *love* has many delicate shades of meaning, which must become evident from the living or the printed context. This is one of the many reasons why translation is, at bottom, quite an impossible task.

If inferences are so dangerous in the case of living languages, and in the case of contemporaneous peoples, how dangerous, indeed, must they be in the case of civilizations long dead? Oertel has cautioned us, on the basis of errors made by distinguished investigators in the first flush of the days when the discovery of Sanskrit seemed to reveal the secret of language and of prehistoric cultures, that "the comparative method is designed for purposes of classification rather than of reconstruction." It is interesting to speculate, on linguistic grounds, about the types of culture that produced certain languages. Such speculation, however, should not be mistranslated as a definite guide to ancient mythology, sociology, or ethnology.

§ 4. THE DIRECTION OF LINGUISTIC PROCESS—LANGUAGE CYCLES

Is it possible, then, that just as certain languages have special predispositions, language itself has certain tendencies; that, as a human invention, in the human mind and on human lips, it shares with all things human certain evolutionary drifts?

There seems to be plentiful evidence that this is so. Whether later languages are superior or inferior to those that preceded is another matter, which deals with adaptability to specific purpose. We do not use stone-crushers to grind meat, nor do we use meat-knives to cut stone.

Linguistic change seems to follow the general course of evolutionary process.

From all the evidence available—that of Darwinism as modified by later research, that of linguistics, anthropology, ethnology—man, whether as a biological structure or as a sentient animal, has been an evolution from formless simplicity to patterned complexity. According to astronomical theory (the nebular hypothesis), the universe itself has obeyed the selfsame formula. Herbert Spencer, no stranger to *sesquipedalia verba,*[8] gives at the end of Chapter XIII of *First Principles* a

[8] The Latin phrase means, not as many mistranslate it, 'six-footed words,' but 'words a foot and a half long'; which is quite long enough! . . . Darwin,

memorable formulation of the law: ". . . a change from an indefinite, incoherent homogeneity to a definite, coherent heterogeneity, accompanying the dissipation of motion and the integration of matter."

In non-Spencerian language this is equivalent to what we mean when we use such expressions as "from formlessness to form" or "from chaos to cosmos." Jespersen has phrased the phenomenon for language in words that recall the Spencerian formula. In his *Progress in Language* he prints the statement in capitals: THE EVOLUTION OF LANGUAGE SHOWS A PROGRESSIVE TENDENCY FROM INSEPARABLE IRREGULAR CONGLOMERATIONS TO FREELY AND REGULARLY COMBINABLE SHORT ELEMENTS.[9] English he prefers over the language of our remote ancestors because it has shorter forms, fewer forms, and fewer irregularities. Paraphrasing Jefferson, one might say, that language is best which governs least.

Zipf, in a bold generalization, has presented a formula that demands close consideration from all linguists and philologists. *"With ever-increasing relative frequency,"* he writes in italics, *"the word becomes the morpheme, which with passing time becomes a phoneme, and finally the component part of a phoneme, until its disappears;* such appears to be the final statement of all linguistic change." [10]

Zipf talks, too, of language-cycles; this is a new idea in language theory and offers startling possibilities.

Has our historical era been long enough for us to appreciate the full significance of linguistic change? Is change from inflectional type to positional type (i. e., from synthetic type to analytic type) an irreversible direction of language evolution, or is it a phase of a cyclic change?

"It does not appear," suggests Zipf, "that sufficient time has elapsed for any recorded language to have passed through a grand cycle of development, so gradual is the process of

who favored a simple, even Anglo-Saxon style in writing, could be as sesquipedalian as Spencer.

[9] P. 127.

[10] G. K. Zipf, *The Psycho-Biology of Language* (Houghton, Mifflin Co., 1935), pp. 249–250.

change. We may probably assume, however, that primeval man did not commence his speech-ways with a highly inflected tongue and that at least one grand cycle has already occurred. Moreover there seems to be reason for belief that we are now completing a grand cycle in certain Indo-European dialects, such as English or French." [11]

This appears to be a consequence of Zipf's theory of equilibrium. A synthetic language becomes overladen with inflexions; its endings weaken and disappear; it becomes, very gradually, an analytic tongue, with a minimum of inflexions and a maximum of positional power, in which word-order takes over the function of making the structure clear. There comes a time, however, when the word-order begins to lack clarity; the process that brought about synthetic, inflectional languages in the first place tends to bring them about again, and the cycle begins anew.

If this has a core of truth, it would suggest—and not for the first time—that it is unsafe to compare the evolution of languages to the evolution of the human species. It is possible, too, that the cycles are not circles; that the return to synthetic forms is not so much a cycle as a spiral.

It is unlikely, for example, that such a verb as English *had* will ever revert to such an earlier form as its Gothic ancestor, *habaidêdeima,* or that a language, once having disposed of the subjunctive form, will reinstate it. This, however, carries us too far into technical theorizing, where for the present, so far as concerns the intelligent layman, the matter must rest.

[11] *Ibid.,* p. 260.

CHAPTER XX

FROM SPEECH TO WRITING

The Moving Finger writes; and, having writ,
Moves on. OMAR KHAYYAM.

But it does not move very fast—An Impolite echo.

§ 1. MARKS INTO SYMBOLS

IT WAS INEVITABLE, UNDER THE CIRCUMSTANCES OF PRIMITIVE life, that one day writing would be invented. It was almost equally inevitable that the invention would be the work not of a genius suddenly appearing in the midst of the social group, but of that group itself—or, rather, of the experiences of that group suddenly finding crystallization in the ideas of such a genius.

For, in a sense, man wrote as soon as he had learned to use his limbs for gesture. Gesture, indeed, contains in part the origins of more than one linguistic process. It was a grammatical aid, indicating relationships, long before organized grammar could have been developed. It served, as it still serves, to eke out the limited resources of speech. In primitive description, as sometimes in the descriptive habits of the civilized, it depicts or describes; it is significant in this connection that to *describe* means not only to 'write down' (Latin, *scribere,* 'to write') but also to 'portray' by speech or writing, and even (as in mathematics) to 'outline.'

Gestures, when used descriptively, are drawings in the air. The gesture that portrays the idea of a beast, if executed against a wall with a hand that had accidentally been covered with material lending itself to transference, would result in a crude representation of the beast. From an overwhelming proportion of the evidence, writing began as drawing, as depiction.

Just as the image precedes the word, so the picture precedes—and by long—the alphabet. Just as speech began with involuntary sounds and with mimicked sounds, so writing began with involuntary gestures or marks, and with what may be described as mimicked sights.

Primitive drawing was to the visible environment what sound-imitation (i. e., onomatopœia) was to the audible environment.

There is a sense also in which man had begun to read long before writing had evolved.

For, simply to remember a place, and to recognize it upon returning to it, is, in a manner of speaking, to read. To recognize the appearance of beast, to follow footprints or the tracks of a brute, is to read. It is, in a word, to interpret a sign. Our word *read* is akin to older words meaning 'to counsel,' 'to advise,' and to the word *riddle,* 'a puzzle.' It contains the idea of interpretation. The first methods of writing were little different from these accidental suggestions of the method. To communicate the idea of a man or a woman, one drew a man or a woman; to suggest a tree, an arrow, a pipe, one drew a tree, an arrow, a pipe. This was not, of course, enough for the making of important or very useful statements. It left too much room for error. It was, however, a beginning.

Language, at this stage, was highly developed. Those who became our first scribes were in far better case than were the first speakers. They had, for the reinforcement of writing, the invaluable aid of speech. The crude drawings they made were as much memory devices, *mnemonics* (Greek, *mnēmē,* 'memory'; *Mnemosyne,* the goddess of memory), as they were communications. They had to be. As we to-day have interpreters of foreign languages, so for a long time in the early history of writing there were members of the tribe specially trained in, and dedicated to, the interpretation of written (or, more exactly, drawn) texts. Without their aid the texts were confused or meaningless. It is as if a child were to draw a half-intelligible scrawl; we should be in the dark as to its intended significance until the child offered a full explanation.

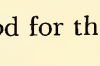
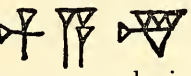
Something of this sort developed, too, in the history of writing before it had reached the alphabetic stage. It is still characteristic of writing-systems such as that of the Chinese, which never outgrew completely the pictorial beginnings. Ancient Egyptian, too, had its "determinatives"—special pictures or characters set aside for interpretative purposes. In cases where ambiguity could arise, it was not enough to use the symbols of the picture-writing; in addition to these symbols an actual picture would be set down, to indicate beyond uncertainty what was meant.

The ancient Peruvians and Mexicans had a system of knots—*quipus*—by which they kept records. Different colors of the lesser cords, which were fastened to a main cord, and knotted in various ways, increased the efficiency of this memory-method. The habit of tying a string around one's finger to remind one of an errand is a sort of modern *quipu*. The wampum belts of the Indians are a form of record in which the arrangement of beads, rather than of knots, serves the mnemonic purpose. A woman at work upon a beaded bag, however, may be pardoned for never entertaining a thought of wampum—at least, not in its original sense.

The various marks used to indicate ownership, as in the branding of cattle, were still at a long distance from phonetic symbols. So were other signs indicating direction or occupation. The barber's pole, striped alternately in white and red, and symbolizing bandage and blood, is a relic of days when the commoner could not read, and when pictures had to do the telling. As children, we looked for pictures long before we could read. Many of us, in our less adult moments, revert to the search. The recent success of the picture-magazines, which owe their origin to the new picture-mindedness of the public, reveals how deeply rooted is this primitive pictorialism. The sounds of language, ultimately, are a symbolizing substitute for seeing.

Where fish is sold, all that is needed as a sign is a crude picture of a fish. A barber shop might have a face being scraped by a razor; it has inherited, however, the familiar pole-symbol,

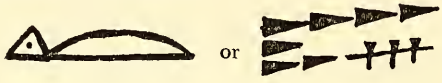
thus advancing from direct picturing to suggestion. With the invention of radio we have been enabled to return to the direct mode of communication—speech.

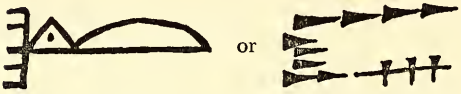
The Peruvians and the Indians required trained interpreters to make clear the meanings of their quipus and their wampums; the interpreters were the living "determinatives" of the recording system. In the chapter on Imagery and Metaphor I gave an example of an Egyptian determinative; let me now give one from Assyrian. Assyrian was one of the *cuneiform*—that is, wedge-shaped—writing systems. The symbol represented *god.* The symbol stood for the sound *a;*  stood for the sound *šur. Ašur* was the name of a god, and would be represented as  ; in order to make certain that the symbols were properly interpreted as the name of the god, the symbol for god, , was prefixed, to *determine* the meaning. It was not pronounced. (These specimens of cuneiform writing are taken from Holgar Pedersen, *Linguistic Science in the Nineteenth Century.*)

Chinese has many homophones—words that sound alike but have different meanings. In order to prevent confusion, other symbols must be added to make clear which of a number of possible meanings is intended. When we emphasize the pronunciation of *incréase* (the verb), to distinguish it from *increase* (the noun), we make use of what might be called an accentual determinative. The Egyptians used pictures to help out their signs; the Chinese likewise use specialized symbols to help out their regular symbols.

Just as many languages, however different they may sound from one another, may be traced back to others that stand in definite relationship to them, so many systems of writing, however different they look from one another, may be traced back to others that stand to them in a derivative relation. This is but another way of saying that systems of writing, like sys-

tems of speaking, evolve from each other. Just as words have etymologies, so have the letters of the alphabet. Words are traced back to other words; the letters of the alphabet are traced back finally to pictures, of which they are the ultimate reduction. It is possible, in writing such as the Egyptian, the Babylonian, or the Chinese, to trace the history of a picture-word back to the original crude drawing. Examples from cuneiform writing are





Phonetic alphabets, such as those of Greek or Latin, or of the modern languages, have lost virtually all trace of their pictorial origins. How, from the status of drawings, they became representations of specific sounds, makes one of the most fascinating accounts in the history of civilization, perhaps next only to the evolution of language itself.

As language expresses thought, so writing expresses language. Writing does more; it preserves language, just as, in time, printing is invented to preserve writing, and is named "the art preservative of the arts."

Without writing there could have been—as, indeed, for a long time there was—culture; knowledge was transmitted by word of mouth, and treasured up in the minds of persons specially chosen for that purpose. At that stage in the history of society, memory was of prime importance. The only encyclopædia man possessed was the minds of these human recorders. There is reason to believe, too, that memory in general, like sight, was far more keenly developed than it is to-day. It was, in those far-off ages, more important than it is in our own time, when so many aids to memory, so many printed repositories of the human accumulation of knowledge, stand ready to hand for consultation. Memory, moreover, is treacherous. Unlike the written record, it suffers lapses. The invention of writ-

ing, besides affording a more trustworthy method of recording messages and knowledge, removed a great burden from the mind, releasing it for other needs, just as the invention of language released the hand from gesture for other needs.

It is quite possible that in our own day we appraise too highly the merely good memory as contrasted with the alert intelligence. It is no longer possible, it is no longer desirable, for one man to contain within himself, like Aristotle, the culture of a civilization. To train the memory is one thing; to cram it is another. The almost superstitious reverence for a good memory, regardless of what it remembers, is a regression to ancient days when such a memory was a necessity of survival rather than an exhibition.

Writing is so late a development in the history of civilization that it requires an effort of the mind for a modern to consider what life was like when communication was limited to the devices of speech and gesture. An English scholar, in a rare study, calls to our attention the astonishment of Augustine at beholding Ambrose reading to himself, silently. "In such a passage one has the solemn privilege of being present at the birth of a new world. Behind us is that almost unimaginable period, so relentlessly objective that in it even 'reading' (in our sense) did not exist. The book was still a *lógos,* a speech; thinking was still *dialégesthai,* talking. Before us is our own world, the world of the printed or written page, and of the solitary reader who is accustomed to pass hours in the silent society of mental images evoked by written characters. . . . It is the very moment of a transition more important, I would suggest, than any that is commonly recorded in our work of 'history.' " [1]

The transition from talking to reading—that is, from talking with another to talking to or with oneself—is not difficult; by that same token, it should not be strange that words meaning the one should tend to take on the meaning of the other. In the history of such a word as *lecture* we have a pretty ex-

[1] C. S. Lewis, *The Allegory of Love* (Oxford University Press, 1936), pp. 64–65.

ample of how a word can mean, at the same time, both *reading* and *talking*. The original meaning of *lecture* is *reading*. A person who gave what we call a lecture usually read his paper to an audience; he thus read and spoke at the same time. To Englishmen and Americans the word *lecture* now emphasizes the content of the address rather than the method—that is, whether it is read from a manuscript, delivered from notes, or extemporized. Speakers of the various Latin tongues, however, still strongly associate the word with actual reading; the French word for what we call a lecture is *conférence,* and a lecturer is a *conférencier*. To us, *conference* carries an altogether different meaning.

The ancient ancestry of speech reasserts itself in our linguistic habits. How many of us think of asking, "What does the newspaper print to-day?" The most normal form of such a request is, "What does the newspaper *say?*" There are persons who have never quite learned to read without moving their lips. When we ask what a newspaper says, we are, so to speak, still moving our lips as we read.

§ 2. SYMBOLS INTO SOUNDS

More exactly speaking, we have no true system of writing until the symbols represent, not pictures, not ideas, but *sounds.*

Our word *write* is akin to the German *reissen:* 'to tear.' Anglo-Saxon *wrītan* meant 'to scratch' or 'to score'; in Gothic *writs* stood for 'a stroke,' 'a dash,' 'a letter.' It is interesting, in this connection, to recall that Latin *litera,* whence, through the French *lettre,* comes our word *letter,* signifies, according to some, 'a scratch,' and, to others, 'a smearing' or 'scrawling.' Skeats relates *litera* to *litus,* past participle of *linere,* 'to besmear'; if this is so, it would be related also to *liniment.*

The earliest drawings were smearings and scratchings. The drawings appear to have been related to magic, as were words and, for that matter, everything else in the primitive life of man. The first drawings were not symbols, however; they were

crude representations. Such a representation is called a *pictogram,* a pictorial representation.

The step from a *pictogram* to an *ideogram* is the step from *direct* representation (however crude) to *symbolic* representation. A circle standing for the sun is no longer a pictogram; it is an ideogram. Two clasped hands standing for agreement, or welcome, no longer make a pictogram; they make an ideogram —the pictorial symbol of an idea.

True writing does not appear until the symbol represents, not an actual sight, not an idea suggested by the sight, but a *speech-sound.* Not until then do we have what is called *phonetic* writing.

The alphabet, such as we know it to-day in many tongues, is one of the final stages of writing—the latest development of phonetic transcription. How did it evolve from picture-making?

It is curious and instructive to consider how the story of writing follows, in its main details, the story of spoken language in all its details. Just as grammar is a gradual sorting out of word-relationships, from a confused mass of meaning, into parts; just as meaning is a gradual sorting out of confused sounds into parts; just as sound itself is a gradual specialization of noises into meaning, so, too, is writing a gradual sorting out, or analysis, of pictorial elements into representations of sound.

Just who first thought of making a picture stand for a sound, it is impossible to tell. Writing, as distinguished from picturing, is some six thousand years old; perhaps much older. Whoever he was (and it may have been a she), that person was one of the geniuses of the human race. Nor did the invention begin by assigning certain sounds to certain letters. Letters themselves are a late invention in the history of writing. The analysis of words into letters—that is, into symbols that stand for each component sound of the word—is a very late triumph of the history of writing, just as was the breaking up of the stream of speech into words.

In writing, the representation of entire words preceded by

long the representation of syllables; and the representation of syllables preceded by long the representation of letters. A crude picture could stand for a word. The drawing of a house meant a house, and would be called a house in speech. The drawing of a camel, in the same way, would be called a camel; an ox would be called ox. When we are taught reading it is usually in association with pictures. "This is a dog." "This is a rabbit."

An early game among children is that of the *rebus;* this word is simply the ablative plural of the Latin word for 'thing': *res.* It is thus associated with such more dignified words as *republic,* i. e., 'the public affair' (*res publica*), and *reality* (i. e., *thingness* or *actuality).* A *rebus* suggests, by pictures, sounds making a sense that has no relationship to the drawings *as drawings.* For example, the successive representations of an eye, a sea, and a yew-tree, could suggest "I see you." The process that has become, to-day, a game for children, was once an important stage in the history of sound-representation. This will suggest to many the technique of the *charade,* which is really an enacted, a gestural, rebus. The origin of *charade* is not definitely established, but most proposed etymologies point to the central idea of talk, or conversation.

Man early evolved, then, lists of signs and symbols. Then he hit upon the idea of suggesting meanings by a succession of pictures. From this he had the happy notion of suggesting, rebus-like, certain *sounds* by pictures. Those sounds were not words; they were syllabic sounds that could be employed regularly in forming any words containing that same unit of sound.

It will help, in learning how our alphabet evolved, to recall the beginnings of the names for the notes of our musical scale. Indeed, as we call the series of our letters an alphabet, or an *a b c,* we might well call the series of our scale-tones an *ut re mi,* or a *do re mi.* As a matter of fact, at least three of the tone-names have entered the language as parts of words: *sol, fa,* and *mi. Sol-fa,* from the Italian, means to sing the gamut or scale; it means also the scale itself. *Solmization* (from the French

solmisation) is built upon the tone-names *sol* and *mi*. It is defined, by the dictionary, *to sol-fa*. It is, literally, *to sol-mi*, but *sol-fa* has come to mean singing the scale, so that *to sol-mi* becomes identical with *to sol-fa*. Our word *solfeggio* is an Italian noun based likewise upon the names *sol* and *fa*. Why the French should select *sol* and *mi* and the Italians *sol* and *fa* is a matter that may amuse us, but need not detain us.

Whence came, in the first place, the names *sol* and *fa*?

Musical notation, like the alphabet, is the result of a long evolution. As the alphabet is not through evolving, neither is musical notation. As the problem of the alphabet is to achieve a system that shall combine a maximum of clearness with a maximum of simplicity, so is the problem of musical notation to achieve the same desideratum.

Again like the alphabet, musical notation progresses from imprecise symbols to more precise symbols. As the letters of the alphabet were preceded by symbols that stood for syllables, so the notes of the musical scale were preceded by signs that stood for groups of tones, rather than for individual tones. The very earliest musical signs, indeed, were signs resembling acute, grave, and circumflex accents—that is, signs indicating, respectively, a general rise in tone, a general fall, and a combined rise and fall, and originating in a simplified drawing of the precentor's arms as he led the singing and indicated, with them, rise and fall. Such accents, in writing, suggest an earlier day when pitch was more essential to language than it is to-day.

The names of the tones in the scale that we know were originally six in number. *Si*, the seventh, is a later addition. The first tone was originally *ut*, not *do*. *Do* is an alteration, and a good one; it provided an easy sound, ending in a vowel, in place of a sound ending in a consonant. In the same way *si* has been changed to *ti*, to prevent the hissing sound of the *s* in group singing.

These names we owe to the percipiency of Guido of Arezzo, an eleventh-century Italian who has been regarded as the founder of modern music. To him is attributed the earliest systematic use of the lines of the musical staff; to him is attrib-

uted, too, the stroke of genius by which a hymn to St. John the Baptist was made to furnish the now so common tone-names of the scale.

The hymn reads as follows:

UT queant laxis
REsonare fibris
MIra gestorum
FAmuli tuorum,
SOLve polluti
LAbii reatum,
Sancte Joannes.

I have capitalized the opening syllables of each line (except the last, which is simply an address to the Saint), as it is these syllables that Guido chose for the names of the tones. For it happened that each of these lines began on a successive tone of the scale C, D, E, F, G, A.

The history of the musical scale is a fascinating study in itself, but does not belong here. I mention Guido of Arezzo for the method that he employed for getting his names: choosing the first syllables of six lines that happened to begin on successive tones.

This corresponds to what, in the history of alphabets, is called *acrophony*. (Greek *ákros,* a term denoting 'highest,' 'apex,' 'tip,' 'summit,' as in *acrópolis,* or highest point in a city —*pólis.*) That correspondence, however, is not to be regarded as an identity. The problem of writing was to convert the *pictorial* method of transmitting ideas into a *phonetic* method. A very ancient predecessor of Guido one day awoke to the discovery that this could be managed in a very simple way. That way has already been suggested in what I have written about rebuses and charades.

Say that the picture of a sheep stands for *mutton*. Why not have the selfsame picture of a sheep, in a phonetic system, stand for the *sound* of the first syllable of *mutton*—namely, *mut* —in all possible combinations? Say that another picture represented a *termite*. Why not have the selfsame picture of a ter-

Genealogy of Some of Our Letters					
Phoenician 13°°-10°° B.C. form	meaning	name	Greek 5°° B.C. form	name	Roman 100 B.C.
𐤀	Ox	Aleph	Α	Alpha	A
𐤁	House	Beth	Β	Beta	B
𐤂	Camel	Gimel	Γ	Gamma	C
𐤃	Door	Daleth	Δ	Delta	D
𐤇	Fence	Cheth	Η	Eta	H
𐤉	Hand	Yod	Ι	Iota	I

mite, in a phonetic system, stand for the *sound* of the first syllable of *termite,* namely, *ter?*

Observe what a tremendous revolution such a system would make in human recording. A picture of a sheep, standing for the sound *mut,* and a picture of a termite, standing for the sound *ter,* could, in combination, stand for the word *mutter, which has absolutely nothing to do with sheep or termites.* Such phonetic formations, based upon the initial *sound* (syllable or letter) of the word for what a picture represented, are called acrophonic, or acrophonetic. *Acrophony* is the name of the process; in this case the element *acro* refers to the first syllable, which may be regarded as the apex or tip (*ákros*) of the word.

The acrophonic invention freed humanity from slavery to the picture as a means of transmitting emotions and thoughts. It stands at the beginnings of *sound-writing,* which is so vast a step forward from *picture-writing.* Yet behind the sound-symbols were the picture-symbols. The pictures are still to be traced back to their original forms, as will be made patent if we examine closely a few letters in our own alphabet.

Our word *alphabet* comes from the Greek; it is made up of the names of the first two letters in the Greek series: *alpha, beta. Alpha* and *beta* mean nothing else in Greek. In the

Semitic tongues, however, from which these names, and the alphabet itself, were taken, they mean, respectively, *ox,* and *house.* Our *a* was originally the drawing of an ox; our *b,* originally, was the drawing of a house. To call an alphabet an *ox-house* sounds, and would be, silly. When we call any tyro an *abecedarian,* we imply that he is at about the stage where one learns his alphabet—his *a, b, c, d. Abecedary* is an old word for a primer of any sort. All suspicion of oxen and houses has long since vanished. Who thinks of, or, indeed, has ever known about, a Latin hymn to St. John, when reading music by the sol-fa method?

In the course of time the picture of the ox (*aleph*) was worn down to symbolic form, just as the sound of *a* represented the phonetic residue of what was once the entire word *aleph.* To return to our example of the sheep and the termite: it would be too laborious to draw, for every *mut* sound, a sheep, and for every *ter* sound a termite. The drawing would, naturally, be set down in hasty, outline form; even so, when we speak rapidly, we say *I've* for *I have.* In time, all resemblance of the written character *mut* to a sheep would disappear, just as surely as all resemblance of an *a* to an ox disappeared ages ago.

Even Chinese writing, which remains pictorial, and which has not developed a phonetic system through the use of acrophony or some other principle, does not at all resemble the original pictures upon which it is founded.

Curiously enough, Japanese, which does not belong to the same linguistic family as Chinese, has developed a phonetic system based upon the Chinese characters!

The material upon which man has written, like the material with which he has written, has provided more than one word for his language.

The word for 'book' in Latin—*liber*—has a history similar to that of our own word *book. Liber* signifies the inner bark of a tree, which was written upon, and thus came to mean paper. *Book* is akin to *beech,* the tree; the German *Buchstabe,* or letter of the alphabet, is 'beech-staff.' *Library,* of course, comes

from *liber;* so does *libel,* which is literally 'a little book,' or 'a lampoon.' *Libretto,* too, is 'a little book' (Italian), but few librettos, whatever other qualities they possess (or lack), are libelous.

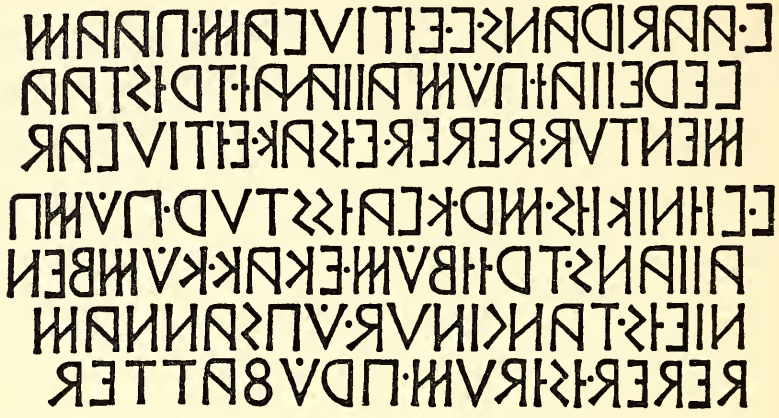
Code (Latin *codex*) was originally the stock of a tree, and then a tablet of wood smeared over with wax, upon which the ancients wrote. *Tablet* itself was 'a board' (Latin *tabula,* which gives in Italian, *tavola,* 'a table'; we still speak of *board and lodging* and of *the festive board*). *Vellum* is but calfskin, and is akin to our *veal. Paper* is derived from the *papyrus* reed, from the pith of which the Egyptians manufactured writing material. In Greek, papyrus is *biblos;* the meaning is older than that of book, which *biblos* naturally acquired. A less familiar word for *library,* in English, is *bibliotheca.* It is, indeed, an obsolete word for the Bible, which, strictly speaking, is not a book, or The Book, but a collection of books. *Bible* comes from the plural of a Greek diminutive—*biblíon;* the plural is *biblía.*

A *pen* is, etymologically, a feather (Latin *penna,* which goes back to the Indo-European root PAT, 'to fly'). As we wrote, but yesterday, with feathers, so the ancients wrote with reeds. *Calamus* is Latin for 'reed'; *quill* is English for 'a reed' or 'a hollow stalk.' see how the meanings of *reed* and *feather* may coalesce. A feather is reed-like and hollow; a reed is hollow; *calamus* thus becomes English for the hollow barrel of a feather. A *quill* becomes, like the *calamus,* a writing-instrument—the feather of a bird becomes a writing-reed. As we have slips of the tongue—*lapsus linguae*—we have slips of the pen (that is, of the reed) in the Latin phrase *lapsus calami.*

Man has set down his records upon every kind of available material—upon stone, upon bone, upon parchment, upon clay, upon paper. The material has naturally determined in a measure the shape and the appearance of his writing. We who are accustomed to set down our written symbols from left to right, find it perhaps surprising that other peoples should have used every other possible direction for that purpose, just as, for a writing system, they used pictures, pictorial symbols.

wedge-shaped marks, straight lines, crooked lines, dots, and what not else.

Man writes in all directions: from left to right, from right to left, from top to bottom, in lines that make a circle, in lines that run alternately from East to West, from West to East; he even writes backwards and, on occasion, upside down. The



AN EXAMPLE OF BACKWARD WRITING

Transliterated this Oscan Inscription from Pompeii reads, from right to left: *V. Aadirans. V. eitiuvam paam / vereiiai, Pompaiianai tristaamentud / deded eisak eitiuvad / V. Viinikiis Mr. kvaisstur Pomp- / aiians triibom ekak kombennieis / tanginud opsannam deded isidum profatted.* The following is the translation: "The money which V. Adiranus, V's son, bequeathed to the association of young men of Pompeii, for this money V. Vinicius, the son of Mr., Quaestor in Pompeii, contracted the erection of this building after the decision of the popular assembly and inspected (and approved) it likewise (after completion)." After Pedersen, *Linguistic Science in the Nineteenth Century.*

Egyptian inscriptions, so largely pictorial, altered even the direction of their symbols so as to conform with the direction of the writing. If a line were carved from left to right, the symbols faced toward the right; if they were, in an alternate line, carved from right to left, the symbols would face from left to right. This is more natural than it seems to us at first thought. Imagine ourselves to be the symbol; when we walk from right to left, we face toward the left; when we walk from left to right, we face toward the right. Many of the Egyptian

symbols were patterned after living figures; hence the naturalness of this calligraphic custom.

Alternation of directions in writing, as we have seen, is called the *boustrophedon,* a picturesque term from the Greek, which refers to the turning of the oxen in their ploughing. (*Boús,* 'ox,' and *strêphein,* 'turn'.) The word *verse* has a similar etymology; *versus,* in Latin, is 'a furrow,' 'a row,' *a line in writing,* and is derived from *vertere,* 'to turn.' *Versus,* in the meaning of 'against,' is likewise from *vertere;* we *turn* against someone. The Russian *verst* is a distance that one may walk before turning back. *Verses,* then, are distinct from prose in that they return and begin new lines, instead of continuing *prorsus,* or 'forward.'

The so-called mirror writing of Leonardo da Vinci is thus a natural process of certain ancient inscriptions. It is determined, not by left-handedness, but by the direction of the signs or letters.

§ 3. SIGNARIES, SYLLABARIES, ALPHABETS

If to the Semites belongs the honor of having provided the essentials of the alphabet as we know it, to the Greeks belongs the distinction of having developed it into a full system of vowels and consonants. The Greeks, in other words, completed the work of analysis.

From the epoch when writing was still largely a system of signs we have collections of *signaries.*

From the epoch when writing was still largely a system of syllables we have collections of *syllabaries.*

Before the Greeks, the various systems of writing in vogue among the Egyptians and the Semites, for example, lacked precise indication of vowels. Either the vowels were not represented at all, or they were suggested by imprecise marks. Hebrew vowels are suggested by a system of marks beneath or above the consonantal (more exactly speaking, the syllabic) characters; so are Arabian vowels. In India, which employs an alphabet modeled after that of the Semites, it is forbidden by

English law to omit the vowel-marks, since such omission causes uncertainty of reading. Pedersen relates an anecdote about a merchant who "is supposed to have sent his relatives a letter which immediately called forth tears and wailing. They read (in Modern Indian): 'Uncle died to-day, and Aunt beats her breast.' A sympathetic neighbor asked to see the letter, and found the correct meaning: 'Uncle has gone to Ajmir, and Aunt is in Kot.' " [2]

Even in modern tongues, similar misunderstandings may arise from the lack of proper punctuation.

Signaries were in use as early as 5000 B. C. The signs were not phonetic; they were representative. Syllabaries were, on the other hand, a cross between word-collections and sound-collections. That is, the syllables had double significance; they stood (1) for a word and (2) for a sound. These syllables, then, were midway between picture-ideas and phonetic symbology. An idea of this double function may be derived from such abbreviations as *lb.* for *pound.* The abbreviation is for Latin *libra,* which means 'a pound' in weight; *pound* itself is from Latin *pondus,* meaning 'weight.' Now, as a phonetic symbol, *lb.* could stand for the sound of *l* and *b,* part of such a word as *album* As an abbreviation, however, it is read and pronounced precisely as if it were written out *p-o-u-n-d.* Latin *et* was pronounced as written; we have made of it a sign, &, which is an abbreviated *et.* We read the sign, however, as if it were written *a-n-d.*

We may now understand how an Assyrian character in a syllabary may have the *syllabic* value of *lah,* and yet mean, *as a word,* 'minister' (*sukkallu*). For & has the phonetic value of *et,* but it has the word-value of *and.*

I have said that the Greeks completed the work of analysis by completing an alphabet in which for the first time a full system of vowels and consonants was provided. We have here yet another example of how the human mind, like nature it-

[2] Holgar Pedersen, *Linguistic Science in the Nineteenth Century* (Harvard University Press, 1931).

self, seems to work from orderlessness to order, from formlessness to form, from conglomeracy to analysis and arrangement of parts. The evolution of writing is thus seen to follow, in its psychological and its physical forms, the evolution of language. As sentence-masses are broken up eventually into words and syllables and phonemes; as conglomerate speech is broken up syntactically into "parts" of speech; so the phonetic representation of sounds is broken up into signs, into syllables without definite vowel-values, and at last into letters standing, however imperfectly, for separate vowels and separate consonants. The analytic trend, in all human endeavor, is irresistible.

As the nineteenth century is the great century of linguistics, so is it the great century of cultural excavation. Archæology has literally unearthed civilizations. It is because of the monuments thus rescued from oblivion that science has been able to construct a connected story of the alphabet, from the picture to the symbol, from the symbol to the syllable, from the syllable to a sort of consonantal system, and from that to the present stage of consonant and vowel.

The Chinese and the American Indian systems, after serving as examples of the earliest pictorial stages, give way in evolutionary interest to the systems that moved forward from pictogram and ideogram. The wedge-shaped writing, or cuneiform (Latin *cuneus,* 'wedge') of the Assyrian-Babylonian epoch and of the Old Persians; the tongues written in hieroglyphics, and in scripts developed from this "sacred-carving" (Greek *hierós,* 'sacred,' and *glýphein,* 'to carve'); the Semitic alphabet and its widely divergent developments; the Greek alphabet; the Roman alphabet—these, historically arranged, provide a vast body of evidence.

In the story of cultural excavation there is a roster of noble names. Associated with the cuneiform inscriptions is the German scholar Carsten Niebuhr, whose travel books of 1778 provided the original basis for the decipherment of the wedge-shaped script. Rawlinson and Westergaard companion him.

The secrets of the hieroglyphics summon up the names of the English philologist Sayce, of George Smith, of Arthur J. Evans, and especially of Åkerblad, François Champollion, and Heinrich Brugsch.

Perhaps the most dramatic of these characters is Champollion. The story of the Rosetta Stone has become almost a symbol of intellectual persistence, and man's success in wresting from stone the secret of an ancient tongue appears far more significant than the successful answer of Œdipus to the riddle of the Sphinx. The riddle asked by the Sphinx, indeed, seems to us frivolous.[3] What Champollion and his associates accomplished in the answer to a real riddle was to make the Sphinx—that is, silent stone—speak and surrender the secret of centuries.

A brief account of their accomplishment must serve as the type for all such discovery and decipherment.

The famous stone was dug up accidentally in August, 1799, by soldiers of Napoleon working upon fortifications at the extreme western mouth of the Nile, near Rosetta. On the stone were inscriptions in three different systems of writing: (1) Egyptian hieroglyphics, (2) what afterwards proved to be the cursive, Demotic script, and (3) Greek. The Greek was known. The problem arose: given a knowledge of Greek, and two inscriptions that represent the Greek text in other tongues; what are those other tongues?

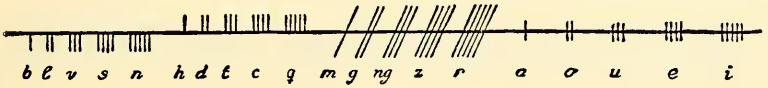
The hieroglyphics were, of course, in the form of drawings. The cursive script looked like an alphabetic system. Clodd points out that in the decipherment of the Rosetta Stone, another stone—a small obelisk from the island of Philæ—played an important part. "The hieroglyphic inscription upon the obelisk itself included certain characters within a cartouche which were identical with those within the only cartouche occurring on the Rosetta Stone. Here, then, was a clue, which was the more easily followed up because the names of Ptolemy

[3] The riddle was, "What creature walks in the morning upon four feet, at noon upon two, at evening upon three?" The answer: Man, as a baby on his hands and knees; as a grown child on his feet; and in old age, with a staff. This is hardly too complex, even for an Œdipus.

and Cleopatra have, in Greek, certain letters in common which could be used for comparison with the hieroglyphics." [4]

The subject-matter of the Rosetta stone was a priestly pronouncement of the boons that Ptolemy V Epiphanes, King of Egypt, 195 B. C. had conferred upon his people. It requires fourteen lines in hieroglyphic form, thirty-two in Demotic, and fifty-four in Greek. One of the great surprises of the decipherment was that the picture-characters (the sacred-carvings) turned out to possess phonetic value. They were, as Champollion proved in the early 1820's, related to the Coptic language, a later development of Ancient Egyptian. A quarter of a century later, Brugsch (1848) deciphered the Demotic system.[5]

The genealogy of our language, English, is Indo-European; the genealogy of our writing is ultimately Semitic, probably through the Phœnicians. As with the language, so with the writing, the line of descent is sometimes obscure. It is difficult to believe that the cuneiform lines can have any relation to pictures, until certain of the wedge-shaped symbols are placed side by side with older forms, and the older pictorial element reveals its ancestral relationship to the wedge-like arrangements. It is even harder to imagine, from a glance at the Ogham (or Ogam) alphabet, that this linear system is related to the Latin alphabet. The name of the Irish Ogham alphabet is said to mean *skilled use of words.* It consists of various arrangements of perpendicular and oblique lines above and below a straight line, as follows:



The Germanic runic alphabet is quite as different from the Latin base as is the Irish Ogham; we are not surprised to learn that runes were supposed to have magic power, and that both

[4] Edward Clodd, *The Story of the Alphabet* (D. Appleton-Century Co., 1938), pp. 118–119.

[5] *Demotic* is from Greek *dēmotikós,* 'of the people,' from *dēmos,* 'the people.' (Compare *democratic, demagogue.*) Another name for the Demotic script was *enchorial.* (Greek *enchórios,* 'of the country,' from *chóra,* 'a place,' or 'country.')

the runes and the Ogham owe their origin to divinities—the runes to Odin, god of wisdom; the Ogham to Ogma, an incarnation of the Gaulish god Ogmios, who presided over eloquence. The Scandinavian runes, instead of straight and oblique lines variously grouped above and below a straight line, used various groupings of parallel lines branching from a vertical stem. The runes and the Ogham, however, are not directly related. Later runic writing reveals only a partial resemblance to the line-branch system.

ᚠᚢᚦᚨᚱᚲᚷᚹ : ᚺᚾᛁᛃᛇᛈᛉᛊ : ᛏᛒᛖᛗᛚᛜᛟᛞ

f u þ a r k g w h n i j ᛇ p z s t b e u l ng o d

(R)

The alphabet that we use, then, shows a fairly continuous descent from picture to symbol to syllable to consonant-syllable to letter. According to the generally accepted theory of Emmanuel de Rougé, it shows, too, a fairly continuous descent from Egyptian to Phœnician (this is the least established of the connections) to Greek and Latin lettering, with offshoots from the Semitic, Greek and Latin. Writing, like language, has its dialects. We write above the line; Ogham writes above and below; Runic writes on either side of a vertical line; the Devanagari (contemporary Sanskrit) alphabet is written under the line.

समादिशत्पिता पुत्रं लिखलेखं ममाज्ञया

ततेनलिखितोलेखः पितुराज्ञानखण्डिता

The ways in which man has written are as devious as the ways in which he has spoken; behind the differences of script and speech, however, is an essential unity that cannot be concealed completely between external differences of sound and writing.

It should be recorded that in the general chorus of agreement upon the origins of the alphabet a stout voice of dissent

is heard. The great archæologist Sir William M. Flinders Petrie, in 1912, issued a challenge to the accepted theory of Emmanuel de Rougé.[6] According to the veteran investigator of the ancient cultures, the alphabet did not originate in pictures. The pictures themselves were preceded by signs and lines.

The signs were part of a primitive trade system, spreading from country to country until a number of them became common property, forming a well-defined signary. Signs, avers Flinders Petrie flatly, rather than pictures are the primitive system. Long before the Egyptian picture writing there had been a "totally different system of linear signs, full of variety and distinction. This early system was certainly in use in its decadence long before any hieroglyphs were in use in Egypt."

These marks, according to the same authority, could develop into symbols as easily as could any picture. They could be used for indicating property, just as marks are used for that purpose to this day. From a status as a property-sign they could advance to that of a word, regardless of its meaning as a property-sign. The sign could then become attached to the sound, and not to the original sense. Flinders Petrie, then, reaches the rebus technique with lines and signs, just as De Rougé reached it with pictures.

According to the newer theory, it would appear that the lines and signs suggested the pictures, rather than the pictures suggesting the signs that developed into our alphabet.

There is nothing about this that is inherently impossible. If it is true that the Semitic *aleph,* which means 'ox,' was derived from the Egyptian symbol that is pictured by a crane, then the Semitic letter could hardly have developed from the pictorial representation of an ox. Similarly, although the Semitic *mem* (with a phonetic value of our letter *m*), means, in Hebrew, 'water,' the symbol from which it developed means, in the original Egyptian, 'owl,' and is to be traced back to the picture of an owl.

It would appear, then, that the names of the letters, in vari-

[6] *The Formation of the Alphabet.* This is one of the Studies Series, Vol. III, of the British School of Archæology in Egypt.

ous languages, need not have descended from the pictures that preceded those letters. The names may have been given after, and not before, the evolution of the letter from some primitive form. In other words, the Semitic *aleph* may have so been named, not because it was originally the depiction of an ox, but because it was customary to name letters after resemblances, and *aleph,* which came from an Egyptian symbol depicting a *crane,* looked more like an *ox* to Semitic eyes, and was so designated.

Support for such a theory is supplied by the naming habits of later nations. For example, the Germanic runic alphabet is regarded as a descendant of the Latin alphabet. It is called *futhark,* on a principle similar to that which names our list of letters an alphabet: that is, the six letters of the runic alphabet were *f*aihu, *u*rus, *th*iuth, *a*ns, *r*aida, and *k*aunzma.[7] Pronounce the italicized initial sounds of these names and you get the artificial word *futhark.*

Each of these letter-names has a meaning. *Faihu* means 'cattle'; its phonetic value is *f. Urus,* with the phonetic value *u,* means a 'wild ox.' Strange coincidence that the first two letters of the runic alphabet, with a phonetic value so different from that of *aleph,* should be called by such names as 'cattle' and 'wild ox.' *Thiuth* means a 'thorn,' and has the phonetic value of *th; ans* means a 'beam of wood,' *raida* a 'cart,' *kaunzma* (conjecturally) either 'pine-wood' or 'touch-wood.' It will be noticed that each name supplies, in its first sound, the phonetic value of the letter. The names of the letters, however, are hardly those of the Latin alphabet.

Thus, too, the Russian alphabet, Greek in derivation, has specifically Russian names for the letters; the names have no relationship to the original Semitic names, which had been given up by the Greeks—that is, so far as any original meaning of the names is concerned. *Alpha* meant only a letter-name to the Greeks; all suggestion of 'ox' had disappeared. In the same

[7] The fact that some of these names are conjectural forms need not disturb us. The word *futhark* has variants: *futhorc, futhork, futharc.*

way, then, *aleph,* to the Semites, meant 'ox,' and all suggestion of the original Egyptian 'crane' had disappeared.

The names of the Ogham characters, moreover, were originally names of trees. These were of four classes: "chieftain" trees, common trees, shrub trees and bramble trees. The four classes or families of the Ogham alphabet are named after (1) common trees, (2) "chieftain" trees, and (3, 4) shrub or bramble trees, respectively.

The theory of Flinders Petrie has not found wide acceptance. It points, none the less, to important disagreements among the specialists, and suggests that much work is to be done before the tale is fully told.

Allied to the ideal of a universal language is that of a universal writing, or *pasìgraphy.* (Greek *pasi,* dative plural of *pas,* 'all,' and thus the equivalent of Latin *omnibus.*) Pasigraphy is loosely employed; it may mean a universal tongue itself; it may mean the employment of universal signs for ideas rather than for words, as in the projected mathematical language of Leibniz; it means, finally, a universal system of writing, analogous to the phonetic alphabet.

§ 4. TOWARD SIMPLIFICATION

The order of the modern alphabet is more logical than it appears. The Greek order is essentially the Hebrew order. Our order is essentially the Latin order. The Russian order is basically Greek.

The basis of the order is the repeated sequence *vowel, labial, guttural (velar)* and *dental.* The history of that order lies outside the scope of these pages. We can get a glimpse of its process, however, even from our own alphabet.

A is a vowel; *b* is a labial; *c* (the hard pronunciation, equivalent to *k*) is a guttural or velar; *d* is a dental.

The Semitic-Greek order, *alpha, beta, gamma, delta,* shows the same sequence: *alpha* is a vowel, *beta* is a labial, *gamma* is a guttural or velar, *delta* is a dental.

To follow the rest of the alphabets in an attempt to fit the theory to the letters and sound-values that we know for them would be to become lost in a maze of archæological reconstruction; for us it is sufficient to know that, however illogical the present alphabetical order may appear, there must at one time have been a logic to it.

To modern eyes and ears, it would seem more logical to group the vowels together, and then the consonants. Even better would be a grouping that associated the various letters (and, therefore, the sounds for which they stand) according to the manner in which the sounds are produced. The letters *p* and *b* would appear close together, as should *t* and *d,* and as should *k* and *g;* the first sounds of these pairs are unvoiced; the second, voiced. Each is made, moreover, in the same part of the mouth. The alphabetical system followed by shorthand employs such a scheme.

This introduces us to the so-called phonetic, or international, alphabet.

The international alphabet is concerned not with the order of the symbols so much as with their unchanging functions.

At present, the phonetic alphabet—based upon the principle of a single symbol for a single sound—is used chiefly by phoneticians—persons whose professional duties impose upon them the utmost care in the consideration and transcription of sounds. Some of the symbols in the phonetic alphabet, besides looking unfamiliar to many people of many tongues, would prove a handicap in the actual daily activity of writing-for-the-ordinary-purposes-of-writing, rather than for linguistic journals. Simplification is needed. Naturally, since numerous languages do not contain sounds that are common to many others, the symbols representing those sounds would not be used in the languages not containing them.

Long before the popularization of anything like a phonetic alphabet, however, there will have to be a thoroughgoing reform of such alphabets as the English and the French.

Let us imagine a state of affairs that would not, and that

could not, be tolerated for a moment in the realm of even simple arithmetic.

We will suppose that the symbol 1 did not always and irrevocably stand for *one,* but on occasion stood for *two* or *five.* We will suppose, too, that the symbol 7 did not always and irrevocably stand for *seven,* but might, subject to certain rules, stand for *twelve* or *nineteen,* or some other number.

Let us imagine a like state of affairs in coinage, whereby a ten-cent piece stood now for a nickel or, again, for a quarter. (I do not have in mind fluctuations of the financial market.)

With such conditions in our monetary or our mathematical systems we could not compromise. A coin, or an imprinted bill, must represent ten cents or ten dollars, as the case may be, without further question. So, too, a 1 or a 7 must be precisely that, under all circumstances. There is no doubt that, if it were necessary for a 7 sometimes to be a 13, we could learn the rules for that change, and manage, with a certain amount of difficulty, to get along. It would be a stupid thing to do, however, and the stupidity would be recognized at once.

Yet how is it with our alphabet?

Our alphabet, and not our alphabet alone, is in the case of the monetary and the mathematical systems that I have just been imagining. Our *c* sometimes has the sound of *k,* and sometimes that of *s.* Our *q* sounds like *k* and can stand only before *u.* Our *g* sounds like our *j,* or, again, it sounds as voiced *k.* What the combination *gh* sounds like has been the constant terror of foreigners. It may stand for *f; g* (as in *Afghan*); or it may remain silent, as in *plough. S* may stand for the sound *z.* We even find a *g* standing for a *d,* as in the word *Magyar* (Hungarian), which is pronounced *Modyar.* This, of course, is a frank taking over of the Hungarian spelling, but it is illogical, misleading, and none the less inexcusable.

Such considerations as these bring up, naturally, the matter of spelling; and English spelling inevitably suggests the matter of reformed spelling. Ultimately we are confronted again with the problem of a more or less universal alphabet.

It cannot be denied that such languages as French and English are far more badly spelled than are such languages as German, Italian, Spanish, Russian, and Greek. These, as opposed to French and English, approach (they do not reach) the ideal of a single symbol for a single sound and a single sound for each symbol. It has been seriously suggested that English school-children lose the equivalent of a couple of student years in mastering the caprices of our orthography. That much of our spelling is capricious may be proved by a review of its history. It is also possible that, as a result, we attach too great importance to correct spelling.

This is not intended to encourage laxity. It is intended, first of all, to suggest the need for certain practical reforms in our spelling; and then to suggest that, for all one's interest in achieving a much-needed uniformity in spelling, we place too much emphasis upon this minor accomplishment. Much of the bad spelling that we encounter in our language is as valid, if unconscious, a protest against unnecessary complexity, as is much of the imperfect grammar a protest against the unnecessary complexity of grammar in general.

It requires no gift of prophecy to foresee a time when our spelling, like our grammar, will be much more simple than it is to-day. Then indeed will our spelling bees of to-day be seen for the generally unimportant things that they are. Then, too, will much youthful energy be released for the learning of vital matters, not of orthographical tricks.

After these serious rebukes to our spelling, it would seem finical to me to suggest that even our punctuation system stands in great need of reform. Punctuation is a more delicate process than most of us realize; also, it is a more personal process. An ideal punctuation system—consider the numerous differences between punctuation in this language and in that—should indicate much more clearly than our own the attitude, the mood, even the tone of voice, of the writer. Such a system has close affinities to musical directions. *Punctuation,* indeed, is derived from Latin *pungere,* 'to prick,' 'to point'; it is correlative with our *puncture.* One meaning of a *point* was

a note in music; whence the title of Aldous Huxley's novel, *Point Counter Point. Counterpoint,* in music, is *note* (point) against (Latin, *contra*) *note*. As the ideal of musical notation is to leave as little as possible to the imagination, so should be the ideal of punctuation and sound-symbolism in poetry and prose.

Printed irony, for example, is an authorial risk. Spoken irony is easily understood, for the vocal inflection makes it unmistakable. In writing or in print we are confronted with the vocal intention minus the voice. Musical notation, having been perfected by persons unusually sensitive to sound as the communication of generalized emotional experience, gives heed to elements that are subordinated by writing.

Perhaps the fundamental difficulty is not so much one of punctuation as of style. For we punctuate not only with marks, but with words and phrases. One of the essentials of style in writing is precisely the transmission, as exactly as possible, of one's intention at its fullest: mood, attitude, tone, voice. The literal meaning is but half the meaning, and sometimes the lesser half; between literality and literature is a great gulf, but not a great gulf fixed. Those elements of the voice that transmit, in addition to the literal meaning, the color of the meaning, we might call the musical element of speech. Style, among other things, transmits this music. Punctuation is but the first step in a process of which style is the highest and the last.

A universal speech, in a universal handwriting, in a universal printed alphabet . . . It sounds and reads like a linguistic Utopia. Perhaps it is; in fact, surely it is. Clodd, writing almost a half-century ago, dismissed the Chinese and Japanese alphabets, after a brief consideration, with the remarks that "neither demands detailed treatment here, since with the intrusion of the Roman alphabet among Western imports into Japan its substitution for the cumbrous syllabaries is probably only a matter of brief time, and the Japanese script may then take its place with the Maya and the Aztec as a graphic curiosity." [8]

[8] Clodd, *op. cit.,* p. 79.

The Western imports into Japan, alas, are more explosive than alphabetic; Clodd's lines read much like the optimism of Sayce in imagining that Germans, upon the advice of Grimm, would surrender their very language in a philological ecstasy of preferment for English.

Yet it is valuable to remember that Utopia, as its etymology suggests (Greek *ou,* 'not,' and *tópos,* 'place') is not a place. *It is a direction.* The wise Goethe knew, for all of us, that it was not the goal that mattered, but the road. Polish, so closely related to Russian, employs the Roman alphabet. The phonetic alphabet is predominantly Roman. The direction of humanity, often over thorny paths, is toward greater and greater spiritual unity. A relatively universal language, of an auxiliary nature, and a relatively universal writing, are at once inner and outer evidence of such a spiritual striving. The moving-picture has universalized sight; television, ultimately, will improve the focus. The radio has universalized hearing. Already, in embryo, we have a cosmic eye and ear, scanning and listening to the heavens, the earth, the sea.

It remains only to universalize the mind. Such a universalization has already appeared, in the form of a few great men. They are, after all, only ahead of mankind, not outside of it.

CHAPTER XXI

FORWARD FROM BABEL

> In dealing with the immense complexity of his social life man has not yet begun to apply inventiveness to the rational planning of ordinary language. . . . Curiously enough, people who are most sensible about the need of planning social amenities in a reasonable way are often slow to see the need for creating a rational and international language. LANCELOT HOGBEN, in *Mathematics for the Million.*[1]

§ 1. DIVIDED WE FALL

IN THE BOOK OF GENESIS, CHAPTER XI, VERSES 1 TO 9, IS recorded one of the earliest theories as to the diversity of human tongues. "And the whole earth was of one language, and of one speech." Then occurred to the inhabitants thereof to build a tower that should reach unto heaven. The Lord came down to see the city and the tower, and, seeing, proclaimed, "Behold, the people is one, and they have all one language; and this they begin to do: and now nothing will be restrained from them, which they have imagined to do.

"Go to, let us go down, and there confound their language, that they may not understand one another's speech.

"So the Lord scattered them abroad from thence upon the face of all the earth: and they left off to build the city.

"Therefore is the name of it called Babel; because the Lord did there confound the language of all the earth: and from thence did the Lord scatter them abroad upon the face of all the earth."

In Genesis, Chapter X, verse 10, mention is made of the Kingdom of Babel; in Assyrian, this means "the Gate of God." In verse 9 of the following chapter, as we see above, Babel is

[1] Lancelot Hogben, *Mathematics for the Million* (W. W. Norton & Co., 1937).

made synonymous with the confusion of tongues. *Babylon* is the Greek form of *Babel.* It does not appear that Babel is the ancestor of our word *babble,* much as an etymology of this sort would seem to be favored by the circumstances. *Babble,* according to *Webster's New International Dictionary,* originated perhaps in the repetition of the phoneme *ba,* "imitative of a child learning to talk." It would thus appear to be another of the numerous words that we owe to infantile phonetics.

Questions of etymology aside, the Biblical account of the manner in which the diversity of tongues came about is clearly the speculation of a people who lived much too early to achieve a scientific understanding of language. Although at least one notable Italian scholar, Alfredo Trombetti, devoted his life to proving that languages arose from a single, proto-historic tongue,[2] there is considerable doubt upon this question to-day.

The Biblical account, then, is to be regarded as unscientific theorizing. On the other hand, if it has not been proved, and if it is probably impossible to prove, that all languages are descended from a single ancestral tongue, there is every evidence that intelligent mankind has long yearned for a common speech. That yearning is to be suspected even in the story of the tower of Babel. Unity of speech is, by inference, looked back to as to a linguistic paradise, just as the confusion of tongues becomes an exile brought upon mankind by arrogance.

At the core of all effort toward the establishment of a universal tongue may be discovered, at long last, a desire for unity. At the basis of this effort, then, may dwell the implication of human brotherhood. This desire, this implication, however, is frequently overcast by the clouds of commerce; the universal, international, or auxiliary tongue (I favor the last of these adjectives) seems to possess no loftier aim than to make easier the transaction of business. The auxiliary language takes on

[2] Alfredo Trombetti, *Elementi di glottologia,* Bologna, 1923. This is a formidable work, packed tight with highly interesting data. It is, like so many large works devoted to the support of a dubious theory, valuable for its particular facts rather than for the general theory in the interest of which they have been marshaled.

the semblance of a glorified pidgin English or lingua franca. There is a practical compulsion for men to understand one another. It is a need, none the less, that, like so many other needs, begins as a concrete, everyday convenience, and ends as a spiritual glory.

There is yet another significance to the unceasing attempts of man to create an inter-language. This attempt is nothing less than a sharp and valid criticism of all natural languages. Man, impatient with the slow-moving evolution toward simple, analytic speech, desires to speed up the process.

It is important to keep this in mind: the so-called artificial languages are less artificial than they appear to be, just as the so-called natural languages are less natural than they appear to be. Languages, unlike poets, are made, not born. Though they are made, and though they develop, in conformity with certain more or less obscure laws of man and nature, and in conformity with the differences that characterize man above his essential likeness the world over, they are the products of his mind and his will. They are not mystical endowments, coming into existence altogether in spite of him. They are not to be likened, in the emotional and intellectual spheres, to those actions of the body called involuntary. They have, in their later developments, enlisted the active coöperation of the beings who used them.

The gradual simplification of language obeys the human predilection for economy of effort. This process of simplification began long before the so-called artificial or universal languages were dreamed of. The universal language, the auxiliary language, the artificial language, is in the direct tradition of this linguistic economy. It is an attempt to hasten, to control more consciously, more directly, that process. Irregular verbs were not decreed in heaven. They are not an ineradicable element of language. They are not a phase of Nature. They have a purely human history, and the desire of thinking mankind to do away with the difficulties that they introduce into language is just as natural as was their appearance historically. We make use of such tools as lie nearest to hand. When we

discover that we can improve upon the tools, we do so, either by more skilful adaptation of what we have, or by the invention of better-adapted instruments.

Irregular verbs, to employ these as symbols of all linguistic irregularity and complication, are a phase of development, not a natural law.

Yet, like all institutions that become hallowed by time, that sink their roots deep into the psychology of mankind, that become so bound up with our history and our needs, they come as it were to enjoy the power of vested interests. To change them is almost tantamount to a revolution. The very irregularities of language come to possess a precious quality that seems chemically a part of our being.

To many, for such reasons as this, the introduction of a new language, even if that language does not pretend to primacy, even if it is clear that such a language is meant to serve only an auxiliary function, looks like an assault upon the very foundations of the social structure. It is almost as if, in defiance of God, man, and Nature, one were to try to create a homunculus out of clay, or to rebuild from its ruins the Tower of Babel.

The invention of a universal auxiliary language, however, introduces no new linguistic process. It does introduce, on the other hand, a heightened consciousness of language and its functions. It may be likened to what Luther Burbank achieved in the grafting of botanical species; or to the cultivation of vegetables in synthetic soil that contains all the necessary elements of plant-growth; or to the control of animal and human breeding. The Burbank process is not a denial of Nature; it is a more conscious use of Nature. The cultivation of vegetables in synthetic soil does not seek to abolish or to contravene any natural law; it makes use of natural law to hasten growth, to liberate the farmer from the accidents of wind and weather, to control the quality of the product.

Since the beginning of the century, indeed, largely through the new psychology of Freud, the general public has become more conscious even of the so-called unconscious. What, for that matter, is medicine but a conscious direction of natural

process? The dentist, in his orthodontic therapy, seeks to control the direction in which teeth grow. On all sides, man makes progress by coöperating with Nature.

Why should he not do so in the case of language?

Since the evolution of language seems to point toward a constant simplification of process, it is not unreasonable to foresee a time when languages, even without the conscious, concentrated intervention of man, will become simpler than they are to-day. Man, however, seeks to hasten the process, to control it. The codified desires that have resulted in so many attempts to fashion a universal tongue are desires that have existed since man first began to make meaning with his breath. Relatively new are not the desires but the concentration of effort.

Among the so-called natural languages, Latin and English have been regarded, at various times, as candidates for linguistic universality. In the middle ages Latin was the language of whatever culture existed in Europe. It had the authority of a great Church; it was the language of theology and of learning. This primacy it maintained, not only in those countries of which the vernaculars were a development of popular Latin, but even in England. As late as the sixteenth century, even schoolmasters in England looked down upon the native tongue. Cromwell desired his life to be written in Latin, so that it might be read by future Englishmen!

In the struggle of the vernaculars against the domination of Latin is to be detected a powerful class impulse. The vernaculars were looked down upon as the jargons of the common people; Latin was the language of the upper classes. The rise of nationalism is always accompanied by a new consciousness of language. In our own day, at the close of 1937, President Manuel L. Quezón of the Filipinos proclaimed Tagalog (a Malay-Polynesian tongue) the national language of his people; English and Spanish continued, however, to be the official languages. That Tagalog should be influenced by Spanish, Chinese, and English is entirely within the natural history of speech. The history of all languages reveals, within the changes

that affect phonetics, semantics, and morphology, a cultural struggle between the various social and economic groups. There are tongues called holy, because of their association with the church. Hebrew and Latin, for example, are still regarded by many as sacred languages.

The proposed primacy of English has, on the other hand, materialistic foundations. These foundations are no less worthy than the sacred associations of the so-called holy tongues. Nor are they less shaky. It is true, as Sayce wrote, that "The great Grimm once advised his countrymen to give up their own tongue in favour of English." [3] What contemporary Germans would think of such a suggestion from one of their truly great philologists is easily to be imagined. Certainly the notion reveals, on the part of Herr Grimm, a temporary lapse from greatness, however much it attests a noble unselfishness. But what shall we think of Sayce's own greatness, when, after the interval of a comma, he adds, "and a time may come when they will follow the advice of the founder of scientific German philology"? This *was* optimism!

Was it more optimistic than Leibniz's idea of a universal language that should consist of algebraic symbols, "which should rest upon a complete analysis of all concepts and ideas and of their relations"? "If this were once successfully accomplished, all controversies would, he hoped, be reduced to mathematical problems, and every error would be perceived as an error in calculation." [4]

The original error, one fears, was not calculated by Leibniz: the idea that life is algebra. The emotions of life may, and should, be controlled in the interests of finer thinking and even of finer emotions. Those emotions, however, are not to be ruled out of life altogether. Much modernist music has been written in the illusion that music may be purged of emotionalism, just as some hardy souls have envisioned a language comprised of a mathematical symbology. Man, however, is some-

[3] A. H. Sayce, *Introduction to the Science of Language,* Vol. II, p. 350.
[4] Hans Oertel, *Lectures on the Study of Language,* p. 279.

thing more than an equation, and for his non-mathematical moments desires a non-mathematical language.

The metaphorical designation of music as "the universal language" is so laden with fallacies that a book might be written upon them. For its supposed universality music sacrifices much concreteness. Moreover, the difference between Chinese music, let us say, and European music is as real to one's ears, in its own way, as is linguistic difference. Jazz, for that matter, is a dialect of music that is peculiar to our own country. Pater's famous saying that "all art aspires to the condition of music" is interesting, and even has a certain validity—the arts look toward immediacy of experience rather than toward the representation of experience. Yet none of the arts is, or can be, universal. Every art, as a system of communication, must deal in symbols; paint symbolizes just as sound does. Where there are symbols, there must be translation. Where there is translation there is chance for error. Where there is chance for error there can be little true universality. We cannot easily mistake hunger; we cannot easily mistake sexual passion. These are universal. Self-preservation and self-reproduction are living imperatives.

A universal tongue, then, is an aspiration toward doing away with the chances of error in intercommunication. Hints as to what we are to eliminate are constantly being forced upon our attention by the mistakes that we hear from our children, from foreigners learning our tongue, from ourselves learning foreign tongues, or from our fellows in the common experience of learning the finer points of our native language. Errors that tend to be repeated should have for all teachers a direct educational significance. They are linguistic straws showing which way blow the winds of evolution.

The future of English is perhaps more safely to be charted from the conditions of American English than from those of British English. By that same token, the future of German is perhaps more safely to be inferred from the looser German dialects, or from such a dialect as Yiddish, in which cases, word-

order and superfluous moods and tenses have all but disappeared, than from the more self-conscious speech of the academic centers. American English is less self-conscious than the academic English of Great Britain; it has no deeply rooted, arbitrarily perpetuated standards, adherence to which is a social compulsion. It is thus more free to evolve along the natural lines of linguistic evolution, and, for that matter, to apply to such evolution, when it becomes conscious of language drift, new linguistic consciousness.

§ 2. BASIC ENGLISH

It has been said that for the understanding of Italian opera a vocabulary of some eight hundred words is amply sufficient. Opera, after all, even German music-drama, deals with a limited number of situations, and, within those situations, with a limited number of human emotions. Georges Polti claimed to have reduced the list of dramatic situations to thirty-six, and there are those who would make the list shorter.

So far as concerns Italian opera, it has often seemed to me that entire scenes could be constructed around a single word. Consider, and not only in parodic spirit, the deep potentialities of a chorus built upon the one word "Andiamo!" (*Let us go!*), or "Gloria!" (*Glory!*) or such a phrase as "Buona sera!" (*Good evening!*). The operatic anthology is fragrant indeed with Good Night choruses, with chants of victory, with prayers and imprecations, that make light demands upon the dictionary.

There is, then, in human activity, a certain basic sameness. The French have codified that observation into one of the most famous of their sayings: *Plus ça change, plus c'est la même chose.* (The more it changes, the more it remains the same.) La Rochefoucauld, I believe, has phrased the same idea from the point of view of the individual: "We differ mostly from ourselves."

It is one of the many virtues of Mr. C. K. Ogden's Basic English that he attempts, and not without considerable success, to reach through the vast, imposing complexity of the language

to the core of its expressive powers. That system is, in a number of important respects, truly the advance over other auxiliary languages that Mr. Ogden represents it to be.

Universal or auxiliary languages, as we have seen, are among other things a highly conscious determination upon the part of man to hasten the evolution of speech, to control it, to direct it.

Basic English goes a step beyond the other auxiliary tongues, however. The other tongues have been frankly artificial. They have been eclectic. They have adopted from this tongue a grammatical principle, from that tongue a word-order or a form, from the other tongue (or family of languages) a cluster of words. There was nothing "natural" about the auxiliary languages. There was no group in the world to whom the tongue would look or sound vital. The complexities of grammar, to be sure, were planed down; the vocabulary, of necessity, was contracted. Nor did the practical results—and it was practical results that were sought—repay the arduous effort expended upon propagandizing even so hopeful a candidate as Esperanto.

Mr. Ogden boldly applied the process of simplification to the one tongue that, in his opinion, was already in a fair way to become practically universal. That tongue was, of course, his native English. Not patriotism, however, so much as calm, scientific examination of the field, led to the choice of English.

The older auxiliary languages had sought to simplify speech and expression in general. This was a natural and a healthy instinct. They clung, nevertheless, to the conventional system of grammar. Mr. Ogden carried the process still further. He frankly abandoned the older grammatical categories, "streamlining" them together with the vocabulary.

This was not too hard to do, since English has evolved into what passes, metaphorically, for a "grammarless" tongue. Within the compass of a vocabulary about as large as that formerly thought sufficient for the understanding of Italian opera —some 850 words—he has compressed the essentials of his Basic English. Such categories as verbs, nouns, and the rest, he dis-

cards. His Basic English deals with *operations, things* and *qualities.*

Ogden carries the analytic tendency of language to a logical conclusion. His 850 words, he maintains, cover the needs of everyday life for which ordinarily some 20,000 words are used. None of the words is unfamiliar; three quarters of them "are constantly used by any English or American child of six." Of the 850 words, 600 describe things or qualities, 150 are descriptive of those things or qualities, and the remaining 100 "put these names and adjectives into operation."

As an example of what Ogden means by operations, as contrasted with the conventional term "verb," we have his discussion of such verbs as *enter, climb,* and *descend.* To enter is to *go in;* to climb is to *go up;* to descend is to *go down.* Verbs such as *enter, climb* and *descend* are discarded in favor of such operations as *go in, go up,* and *go down.* This is more than the etymological break-down of compound verbs; it is the break-down, the analysis, of fundamental ideas. Of actual verbs, some sixteen appear in Basic English; other actions are represented, as we have just seen, by combinations of verb and preposition, just as they are, let us say, in Latin: *de*termine, *ab*scond, *re*-sume.

As Ogden abandons the word *verb* in favor of *operator,* so he suggests, instead of *preposition,* the term *directive.* This is at once sensible and genuinely English. We forget, of course, that preposition means *placed before.* In Latin, prepositions are really *pre*-posed. In English they occur before or after the verb, and even at the end of a sentence, despite the humorous rule that "a preposition is a bad thing to end a sentence with." There is just as much reason for abandoning such terms as *preposition* as there is for abandoning, in English accidence, such inherited terminologies as *accusative* and *dative* case. Or, for that matter, the term *case* itself.

Basic English, then, marks an advance not only in the provision of a vital auxiliary language, since with a small vocabulary of 850 words, and with a minimum of grammar, any foreigner may quickly learn the fundamentals of English; it

marks an advance in the study of language itself. It suggests a skeletonic structure for the study of any language, including the study of English by Englishmen and Americans. Basic English, indeed, provides the basis for a method that may be described simply as Basic. Each language, through scholars of tact and high competency, may provide its own Basic. That method will make all the simpler the understanding of language in general, and of the more complex forms of any particular language.

"With the efforts of educators to reduce the amount of energy at present wasted on the acquisition of foreign languages, which should henceforth be regarded as a technical specialty, supporters of Basic are in full agreement," writes Mr. Ogden. "Basic itself is a valuable exercise in the understanding of word-behavior. It forms an admirable introduction to that further study of the relations of thought and language which will prove a potent antidote to all forms of Word-magic in the future. Its analytic structure makes it desirable for the learner to understand rather than to learn by rote. . . . Above all it is important that the arguments for an international language should not be presented—as is inevitable with any constructed system—in merely idealistic terms; as the outcome of some unstable enthusiasm or arbitrary philological principle." [5]

§ 3. THE TYRANNY OF LANGUAGE

The revolt against artificial languages is older than Mr. Ogden's pertinent observations. In England it is to be found, and quite naturally, in the writings of V. Welby, who is one of Mr. Ogden's forerunners in the emerging science of semantics. It is to Welby, in fact, that we owe such terms as "significs," which she invented as an improvement upon semantics. In

[5] C. K. Ogden, *The System of Basic English*, p. 33. The book contains a full exposition, as well as a bibliography of writings upon Basic English and translations, into Basic English, of such classics as *The Gold Bug*, by Poe; *Robinson Crusoe; Lamb's Tales from Shakespeare;* and Anna Sewell's *Black Beauty*. It is interesting to observe that the Lamb classic, in the Basic English translation, is titled *Stories* (not *Tales*), and that Poe's mystery appears as *The Gold Insect*.

her *What Is Meaning?,* which seems to have suggested the title of Ogden and Richard's *The Meaning of Meaning,* she rejects various proposals to make, even of natural languages, international media. Italian, she writes, in opposition to a suggestion made by Sir F. Bramwell, is out of the question. But so, she adds, is English. Latin and French are likewise read out of court.

The truth is that Welby, intent upon reforming not only language but the linguistic-mental process, demands a radical reëducation of mankind in "significs." The true "common language" of the future, she maintains, "—so far as one can be used at all—will not be artificially foisted on the present system of education; it will be a spontaneous and thus really effective product of that change of educational standpoint and aim which the method of 'significs' involves."

The point, though neglected, is well-taken. It is to be remembered in connection with what I have said about semantics in a previous chapter. It is impossible to purify the linguistic process without first, or at least concurrently, purifying the mental process. If we are to write better, we must think more clearly. Clearing language of encumbrances will help; this has been one of the seemingly inevitable laws of language history. However, if thought is not language, neither is language thought. Clear thinking should lead to clear expression, but clear expression is not enough for clear thinking. There are no "right" and "wrong" words apart from their ineffective or incorrect use. The understanding of words implies an understanding of situation, and situation, or context, implies the coöperation of the intelligence. Mrs. Welby, in her writings upon "significs," insists upon a distinction between *meaning* and *sense.* Sense is definition; meaning implies intention.

Welby, then, foresees, beneath common, or universal, languages, a cleansing of signification. She demands, then, not only a common language (sense)—"so far as one can be used at all"—but a common meaning. "For even if the whole civilized —or intelligent—world could be brought by means of some

great international movement to unite in the formation and consent to the use of such a language—whether an old language adapted or a new one constructed—it could at best but touch the surface of the question, and might indeed easily tend, by engendering content with unworthy ideals, still further to hamper and discourage that development of linguistic resources for which at present the very variety of tongues and dialects must indirectly make. . . . With an artificially introduced and sanctioned universal language, imposed upon us at our present stage of linguistic development, much of this precious psychological heritage would wither and be wasted and lost. It may be that the world cannot do without that opulence of distinction in idiom which makes for richness of human life as a whole. . . ." [6]

[6] V. Welby, *What is Meaning?* (Cambridge University Press, 1903), pp. 211–212.

CHAPTER XXII

TO-MORROW

"You can't change human nature." A superstition of the people, and of some learned gentlemen.

§ 1. APPLIED INTELLIGENCE

THE ITALIAN PHILOSOPHER CROCE, TAKING THE SUGGESTION from his great compatriot Vico, of the seventeenth and eighteenth centuries, discerns behind all the physical aspects of language a certain spiritual reality. Karl Vossler, leader of the spiritual school in language, stems in part from Croce. Myself, I would wish, among the improvements of the new semantics, for a terminology that did not make so definite a distinction between body and mind, between the physical and the spiritual. This is a dualism that we have carried over from the days and nights of primitivity. Language is thickly burdened with such vestiges of ill-adjusted thinking and feeling, and one of the problems of the future is to eradicate them from expression.

Language has what may be described, and not only in a metaphorical manner, its psychopathology. The persistence of genders, cases, agreement of adjectives with nouns, systems of verb-endings, and all other such linguistic impedimenta, suggests the sight of a great edifice before which the builders have left the scaffolding that was necessary to its erection. What was once a necessity thus becomes an obstruction.

Irregular verbs, irregular plurals, fussing about *shalls* and *wills,* tenses that indicate needless refinements upon the perception of time—these go back to an epoch in language when man was insufficiently acquainted with the process of language, insufficiently conscious of the way in which errors could be made and perpetuated. To wink at the persistence of such ir-

regularities is, at this stage of our knowledge, a disguised form of ancestor worship; and there was much ancestor worship in the ancient fondness of our pioneer philologists for the complicated grammatical systems of the earlier languages.

There is an attitude—it is the general one—that might be called linguistic *laissez-faire*. It is—to choose an exaggerated figure—as if a medical investigator had discovered the germs of certain diseases, and then, instead of seeking fervently for an antitoxin, or for some other type of cure, he were to cultivate the germs and spread them broadcast. The fondness with which certain teachers instruct their charges in the needless intricacies of grammar suggests a linguistic sadism. These grammatical intricacies are not conditions to be fostered; they are ills that should be eradicated.

It is hardly to be questioned that hitherto the many changes taking place in pronunciation, meanings, and forms, have been largely of an unconscious nature. It is not to be questioned that there has been, too, a considerable element of consciousness. That element of consciousness is always increasing in area and in depth. It can, and should, be brought to bear by our linguistic leaders upon the elimination of the much too highly venerated irregularities of spelling and grammar. The Russian revolutionists actually eliminated a few superfluous letters from their alphabet. The French revolutionists of an earlier epoch were not so fortunate.

"Often indeed," writes the Danish semanticist Nyrop, "complaints have been heard that the meaning of words was so oscillating and so uncertain, and that content and form stood in such sharp contrast to each other. Courageous souls have tried to mitigate this. In France, during the epoch of the Revolution, the question of language-reform was repeatedly brought up. Yet, while everything else in the nation was overturned, while age-old social and political institutions performed somersaults, it was remarkably evident that even to the most radical elements the language, in its traditional form, was sacred and inviolable. Sicard proposed to the Convention a measure to alter the orthography, but failed ignominiously; he desired

that a few of the numerous silent *e's* be eliminated; but this seemed to his revolutionary comrades so revolutionary a thought that the silent *e* was at once declared to be national property. *L'e muet est propriété nationale.* Talleyrand, too, attempted, avowedly under the influence of Condillac's philosophy, to reform the language, but as a wise statesman he left spelling untouched. He deplored the fact that the language was too poor, that it possessed too few artistic locutions, and that the meaning of its words was too hazily defined; he was interested in creating an energetic political language, in which the significance of each word would be sharply, clearly defined. 'Every citizen,' he wrote, 'must coöperate in the task of eliminating from the French language all words that have a wavering, uncertain meaning, and are therefore so comfortable for ignorance.'

"Naturally, all these efforts collapsed. . . .

"No language submits to administrative reform. Cæsar, despite everything, could not impose his will upon grammar or grammarians. . . ." [1]

We need more hardy souls, willing to introduce and to fight for primary changes in the various aspects of language and its symbolic representation. The secondary changes—the adoption of such individual alterations by the general public—will follow. Silent *e's* are no longer national property. And emperors (provided they know what they are dealing with) *can* change, or help to initiate change, in the grammar of a people. Expert knowledge and expert adaptation are what make the emperors of language.

Sometimes, in my linguistic nightmares, I seem to hear a lost (?) stanza of an international anthem. Inevitably it explodes my slumber:

My grammar, 'tis of thee,
Sweet incongruity,
Of thee I sing.

[1] Kristoffer Nyrop, *Das Leben der Wörter.* (This is a translation into German, by Robert Vogt, of Nyrop's Danish original, *Ordenes Liv.* I translated from the German edition, pp. 178–179.)

I love each mood and tense,
Each freak of accidence,
Protect me from common sense,
Grammar, my king!

There is no good reason why we should continue, in the light of what we know about language, to be at the mercy of outmoded habits of thought, of expression, of spelling, of grammar. Nor am I proposing linguistic regimentation. To wish to remove fetters from one's arms, and hobbles from one's legs, is not to wish that all men may gesture and walk alike. It is to desire for mankind a welcome liberation from the bonds of its own imperfections. It is to ask for, to create, the indispensable conditions for further conquests of the intelligence.

It is, in the interests of a dynamic economy, to establish—as we must forever be establishing—a new economy. It is to bring language back to vitality, to life.

It is, in brief, to reassert our mastery over speech, and over the other circumstances of wisely adaptive living.

INSTEAD OF A BIBLIOGRAPHY

It is customary, in a work of this sort, to list at the end a large number of books intended for the further studies of the reader. Often, to be sure, the list is a tribute to the writer's, rather than to the reader's, industry. Many of the books thus listed are hard to procure; too often, when procured, they turn out to be hard to read. They are meant, that is, for specialists.

It would have been easy indeed to provide for this book a long, imposing bibliography. That list, however, would have been of use chiefly to a student; for the intelligent layman it would have contained material far too specialized in character. Moreover, such lists are readily available in other books that the layman, if he wishes to go deeply into the subject, will have to consult. Some of these books I indicate hereunder; more of them, naturally, have been referred to in the text. The careful reader, then, is already acquainted with the names and works of the notable authorities upon linguistics.

One who wishes gradually to acquaint himself with the vast literature of language had better begin modestly—and most pleasantly—with such general writings as those by Ernest Weekley. That name upon any book is a sufficient guarantee of its worth. I should leave phonetics well toward the last, centering attention at first upon the semantic aspects of word-history. By the same token, general principles can always wait upon particular illustration. It is injudicious to begin sorting until we have acquired a large supply of material to sort.

The writings of Messrs. Ogden and Richards are unfailingly stimulating, and on occasion healthily provocative. I may say, at this point, that I favor the reading, first, of writers close to us in time. The older writers, however famous, are for later study; much in their pages has been superseded and has historic rather than instructive importance.

If, of the contemporary professional philologists, I had to choose but one, my choice should fall unhesitatingly upon the

complete works of Otto Jespersen; not because he is infallible—what a presumptuous word!—but because he has humor, humaneness, unacademic resiliency, and because to him language is preeminently a vital, many-faceted organism.

Jespersen's *Language* contains a good bibliography. So does *Language* by Vendryès. *Language and Languages* by Willem L. Graff has an exceptionally full list, and, like these others, contains many titles intended for the specialist only.

The chief task of the layman, in expanding his field of interest, will be to select writings that will not alienate him by their excessive professionalism. On the other hand, if he wishes to advance toward a scientific grasp of the overwhelmingly copious material, he must be prepared for the necessary rigors of the linguistic discipline.

SUBJECT INDEX

Abel, 242, 246
Accent, 185, 233, 234, 250, 373
Acrophony, 433
Action and interaction, 62
Æsthetics, 352
Ain't, 343
Alliteration, 64, 357
Alphabet, 429, 439, 445, 447
Alverdes, quoted, 59
Ambivalency, 246
Analogists, 42
Anaptyxis, 211
Animal speech, 21, 23, 25, 59
Animals, imitative, 16, 41
  kinship with, 7, 15, 17, 25, 28, 148
Anomalists, 42
Anthropology, 26
Anthropomorphism, 76
Apes, language of, 15, 20, 21
Archæology, 439
Artificial languages, 453
As if, 86
Aspirates, 235
Assimilation, 207
Association, 137, 206, 209, 283
  psychological, 3

Babel, 451
Baby influence, 150
"Baby" talk, 157, 164
Bacon, Francis, 311
Bain, quoted, 244
Balance, 353
Baring-Gould, S., 142
Basic English, 309, 458, 459, 460, 461
Beethoven, 310
Betrayal by pronunciation, 193, 194, 199
Bible, 123, 124, 263, 276, 362, 413
Bierce, Ambrose, 380
Bipolarity of words, 239
Body, 55, 68, 183
Bopp, F., 220
Bow-Wow theory, 45, 46, 48, 136
Brain, 16, 23, 26, 29, 30
Bréal, M. quoted, 134, 216, 386
Breathing, 21, 22, 29, 36, 40
Briffault, R., 39, 386
Buchanan, S., quoted, 86
Bunyan, John, 126, 128
Burbank process, 454

Cacophemism, 104, 106
Cacuminal, 179
Calendars, 127
Case endings, 54
Change, 137, 183, 191, 196, 200, 202, 212, 213, 224, 254
  linguistic, 15, 23, 25, 66, 420
  phonetic, 212
  primary, 192
  secondary, 192
Chase, Stuart, 311, 313
Chaucer, 214
Child, 42
Child phonetics, 157, 189
Children's verbal play, 153
Chinese, 63, 65, 73, 75, 390, 415
Chivalry, 259
Circumlocution, 106, 144
Civilization, 11, 37, 58, 69
Clarity, 298, 299, 302
Class distinctions, 112
Classic, 254, 257, 258
Climate, 182
Clodd, Edward, 140
Communal labor, 51
Communication, 337
  international, 309
  man-animal, 25
Connotations, 63
Consonants, 168, 175, 177, 178, 179, 199
Controversies, language, 42
Correctness, 336, 338, 347
Correspondence, mystic, 43
Correspondences, phonetic, 223
Counting, 33
Court language, 112
Cowper, 216

Crowd psychology, 41
Culture language, 112
  linguistic, 7
  savage, 6, 7, 17
Cuneiform, 425

Dante, 364
Dantzig, T., 32
Darwin, 13, 58, 122
Days, 127
Deception, 164, 165
Defects, unnatural, 159
Degeneration of words, 270, 298
Dentals, 229
DeQuincy, 354, 386, 405
Deviation, phonetic, 189, 191
Dialect, 190, 193, 293
Dictionary, 352, 381, 384
Digits, 33
Diminutives, 164
Ding-Dong theory, 45, 47, 48, 136
Diphthong, 176
Dog, domestic, 16
Dogs, bark of, 16, 46
Doublets, 289
Douglas, Norman, quoted, 121
Drama, early, 65
Dream *vs.* reality, 40, 60, 84, 85

Echoism, 44, 45, 46, 47, 51, 76, 151
Economy of words, 198
Egyptian, 74, 242, 441
Eidetic imagery, 51
Emerson, R. W., 363
Emotion, 8, 9, 35, 59, 63, 65, 297, 298, 303, 307, 456
English, Basic, 309
Esperanto, 211
Etymology, 44, 98, 275, 283, 284
  false, 283
  scientific, 284
Euphemism, 104, 116, 144
Evolution, linguistic, 457
Evolution of man, 27
Exaggeration, 163
Excommunication, 2
Experience, physical, 12
Expression, facial, 8, 9, 10, 63

Facial expression, 8, 9, 10, 63
Farrar, F. W., 48, 50, 240
Father and Son, 81
Fertility rites, 61
Figures of speech, 60, 71
Flexibility, 337
Flower-girl, 192
Foreign language, learning, 158
Form, 11
Fowler, H. W., 372
French, 224
Freud, 84, 122, 204, 237, 239, 246, 247, 454

Garner, R. L., 15, 16, 32
Gender, 335
Geology, 26
German, 245, 404
Germanic languages, 398
Gesture, 8, 9, 10, 31, 34, 35, 53
Get, 376
Gilbert, W. G., 237, 319, 369
Goethe, 9, 216, 450
Goldwynisms, 245
Grammar, 77, 319, 324, 337, 348
Grassman's Law, 235
Greek, 112, 217, 224, 227, 242, 268, 416
Grimm, Jacob, 174, 175, 220, 226, 227, 228, 231, 232, 456
Guiterman, Arthur, quoted, 296
Gutterals, 230

Hand, 10, 11, 30, 31, 33, 53
Haplology, 204
Hebrew, 217, 240, 248, 260, 404, 412, 413, 456
Henry VI, 382
Herbert, A. P., 376
Hieroglyphics, 74, 219, 439
Hissing, 22
Hogben, L., 451
Hooton, 26, 27, 28
Huxley, Aldous, quoted, 98

Image-maker, 71
Imagery, eidetic, 51
Images, 86
Imsonic words, 45, 46, 50
Indian-Hebrew, 291
Individuality, 40
Indo-European, 322, 392, 398, 400, 401
Infant speech, 150
Infant study, 7
Intelligence, applied, 464
Interjections, 46, 49, 64, 68

Inversion, 248, 249
Irony, 64
Islanders, 182

Jaensch, Rudolf, 51
Janet, Pierre, 29
Janus words, 239-249
Jargon, 387
Jaw, 32, 53
Jespersen, O., 44, 57, 58, 59, 62, 76, 147, 156, 203, 420
Jews, 118
Johnson, Samuel, 221, 301
Jones, William, 219
Juno, 94

Kant, 354
Korzybski, A., 296, 316, 317

Labials, 229
Ladies, 269
Laissez-faire, linguistic, 465
Lallation, 50, 51
Language of apes, 15, 20, 21
  controversies, 42
  court, 112
  cycles, 420
  foreign, learning, 158
  form of action, 29
  fully developed, 36, 37
  infancy of, 20
  living and dead, 181
  man's achievement, 13
  as play, 57
  potential, 9
  psychology of, 189
  psychopathology of, 464
  reform, 465
  a social process, 1
  synthetic, 421
  and thought, 28, 29
  woman's, 161
Languages, artificial, 453
  dead, 183
  Germanic, 398
  parent, 184
  Romance, 398
Latin, 112, 217, 224
Latin America, 407
Latin *vs.* vernacular, 112, 161, 184, 222, 455
Law of linguistic evolution, 61
Laziness, 196, 197, 198, 199
Learned, Blanche W., 21
Leibniz, 218, 456
Lemur, 24
Lexicography, 275
Life of words, 251
Lincoln, 362
Lingo, 387
Linguistic change, 15, 23, 25, 66, 420
  culture, 7
  evolution, 457
  geography, 293
  lag, 250
  laissez-faire, 465
  law of, 61
  origins, 15, 42
  standards, 387
  theories, 38, 42, 45, 49, 53, 182, 216
Locke, John, 47, 306
Love, 58
Love theory, 57
Love's Labour's Lost, 382
Lungs, 36
Lying, 165

Machines, 302
Magic, 60, 61, 98, 117, 314
Malinowski, 59, 67
Man-animal communication, 25
Man, evolution of, 27
  fossil, 26
  the measure, 76, 81, 134
  as an organism, 40
  prehistoric, 5, 6
  primitive, 38
Mana and names, 140
Marriage, left-handed, 30
Marry, 370
Mathematics, 312
"Me," 42, 339
Meaning, 37, 67, 238, 250, 275, 308
Meaning shifts, 274
Meanings, secondary, 63
Melodic outlines, 65
Memories, racial, 42
Memory, 426
Mental equipment, 313
Metaphor, 71, 76, 78, 84, 86, 87
Metaphors, mixed, 86-94
Microphone studies, 25
Midsummer Night's Dream, 121
Mimicked sounds, 45
"Missing link," 16, 26

Mithridates, 216
Months, 128
Moral preconceptions, 61
Morphology, 66
Mother, 39
Müller, Max, 13, 15, 21, 45, 47, 53
Music, 34, 59, 62, 64, 77, 457
Musical notation, 431
Mysterious universe, 140
Mystic correspondence, 43
Mythology, 122

Name, changing, 141
  shortening, 200
Name-power over thing, 140
Names, 121
  Biblical, 123, 124, 145
  calling, 296, 298
  Greek, 125
  into words, 130, 136, 138
Naming, 44
Naming inventions, 72
Nationalism, 405
Nature, 9, 40, 42, 121, 122
Negro, 344, 410, 411, 412
  grammar, 410
Nervous system, 8, 40
New York, 190
Noiré, Ludwig, 51
Nomenclature, hereditary, 142
Novelty-hunting, 371
Number, 32
Numerology, 141, 142
Nyrop, K., 465

Oaths, 145, 276
Obscenity, 110, 313
Oertel, 194, 202, 203, 210, 228, 417, 419
Ogden, C. K., 309, 458, 459, 460, 461
Onamatopes, 45, 48, 57
Onamatopœia, 44, 45, 46, 47, 48, 49, 64, 68
Opera, 458
Oratory, 64
Organization, physical and spiritual, 3
Origins, linguistic, 15, 42
Othello, 371
Overtones, 238, 375

Paget, Richard, 53, 173
Pareto, 321
Pavlov, 68
Pedersen, quoted, 183
Perception, 46
Petrie, Flinders, 443
Phatic communion, 59
Philologers, 216-236
Philologist, comparative, 20
Philology, dynamic, 235
Phonetic change, 212
  correspondences, 223
  snares, 193, 199
Phonetics, 66, 169, 174, 180, 192
Physical experience, 12
Pictogram, 429
Pictorial language, 85
Pitch, 172
Pitkin, Walter B., 414
Play theory, 57
Poetry, 40, 60, 61, 97
Politics, 296, 298, 299
Polyglot, 216
Pooh-Pooh theory, 45, 48
Pope, Alexander, 372
Posture, 6, 27, 32, 35
Prepositions, 54
Primitive code, 61
  man, 38
  thinking, 316
Printing, 14
Profanity, 110
Pronouns, 134
Pronunciation, 181, 187, 189, 191, 193, 202
Propaganda, 303
Psychic data, 247
Psychoanalysis, 85
Psychoanalysts, 205
Psychological association, 3
Psychology, 342
  crowd, 41
  of language, 189
Psychopathology of language, 464
Punctuation, 448
Punning, 284
Purism, 369-385
Purists, 348
Pygmalion, 192

Racial euphemism, 117
Racial memories, 42
Radical, 299
Rask, R., 220, 226
Recapitulation, 322

Records, 424
Reduplication, 150
Reflex, 8, 9, 35, 36, 37, 41, 43, 45, 68
Reforming language, 465
Renan, 262
Reynolds, Bishop, quoted, 1
Rhetoric, 77, 352
Rhythm, 373
Richard II, quoted, 2, 5
Right-and-left-handedness, 30
Robinson, James Harvey, quoted, 38
Roland, Mme., 314
Romance languages, 398
Romantic, 254, 257, 258
Rooster sounds, 47
Roots, 392
Rosetta Stone, 219, 440
Rules, grammatical, 338

Sandhi, 208
Sanskrit, 30, 31, 48, 52, 391, 393-395, 397-401
Santayana, George, quoted, 1, 9
Sapir, E., 49
Savage culture, 6, 7, 17
Sayce, A. H., quoted, 20
Schwidetzky, G., 20, 23, 24
Secondary meanings, 63
Semantics, 66, 296, 312, 315
Sensation, 46
Senses, 9, 40
Sex, 58, 62, 276, 313, 334
  in tongue gestures, 55
Shakespeare, quoted, 2, 5
Shakespeare's imagery, 75
Shaw, G. B., quoted, 189, 192
Shortening of words, 198, 203
Sight, primitive, 51, 52, 84, 85
Simplified spelling, 159
Skeat, W. W., 275
"Slanguage," 363
Sokolsky, G. E., 303
Somatic symbolism, 55, 68, 81
Song, 35, 39, 59
Sound, 8, 23, 36, 38, 40, 43, 67, 68, 183
Sound-imitative theory, 49
Sounds, 167, 175, 190, 212, 237
  classification of, 173
  mimicked, 45
  rooster, 47
Space, 214
Spanish, 224
Speech, aboriginal, 15
  animal, 21, 23, 25, 32, 59
  derivation of, 15, 21, 22
  disturbances, 153
  infant, 150
  inseparable factors of, 168
  vs. language, 22
  mechanism of, 168
  parts of, 323, 331
  psychology of, 168
  study of, 168
Speed, 196, 199
Spelling, simplified, 159
Spengler, 247
Spirit, 69, 293
Spiritual organization, 3
  reality, 464
  unity, 450
Split infinitive, 367
Spurgeon, Caroline, 75
Standards, linguistic, 387
Stein, Gertrude, 154, 356
Stoics, 44
Stress, 185
Style, 77, 352, 355, 449
Subtlety, 10, 35, 173
Superstitions, 140, 143
Sweet, Henry, quoted, 167
Sycophancy, 195
Syllables, 208
Symbols, 86, 298, 315, 424, 428
Symptoms, 85
Syncope, 210
Syntactical relationship, 54

Taboo, 107, 114, 115, 141, 144, 160
Talleyrand, 350
Taylor, Isaac, 138
Theater, 113
Theories, linguistic, 38, 42, 45, 49, 53, 182, 216
Thinking, primitive, 316
Thinking and feeling, 9
Thompson, Dorothy, 300
Thought and language, 28, 29
Throat, 34, 45
Time, 214
Tongue, 2, 10, 11, 12, 27, 53, 54, 55, 153
  slips of, 204
Tongue-twisters, 199, 205
Tool, 11, 454
Translation, 71
Trench, 250, 261

Trombetti, Alfredo, 15, 218, 452
Trope, 77, 78

Umlaut, 212
Understanding, beginning of, 12, 39, 40, 68
Unity of speech, 452
Universe, mysterious, 140
Usage, 43
Utopia, 450

Variation, 354
Verbigeration, 153
Verbs, irregular, 213, 453
Verner, Karl, 226, 232
Versification, 64
Vibration, 172
Vocal chords, 34, 63, 69, 171
Vocalism, 16, 27, 32, 179
Voice, 449
  and action, 29
  evolution, 22, 32, 34, 168
  human, 171, 179
  as instrument, 167
  mechanical reproduction, 173
  primitive, 9, 10, 32, 34, 54
Vossler, Karl, 464
Vowel, 167, 175, 178

Wave theory, 396, 397
Webster, Noah, 221, 369
Welby, V., 461
Wells, H. G., quoted, 12, 98
White, Richard G., 350
Whom, 347
Wig-Wag theory, 53
Wishfulness, 297, 312
Woman *vs.* man, 165, 166
Woman's influence, 162
Women's languages, 161
Word, 11, 72, 191, 197, 198, 201, 203, 237, 275, 298, 311, 317, 319, 360
  content, 237
  evolutions, 72, 191
  history, 275
  length, 197, 236, 360
  as sentence, 319
  shortening, 198, 201, 203
  significance, 311
  treachery, 311
Words, 44, 138, 139, 239, 251, 270, 285, 298
  bipolarity of, 239
  commercial, 44
  degeneration of, 270, 298
  derived from names, 138, 139
  Janus, 239
  life of, 251
  related, 285
Writing, 14, 322, 422
Wundt, 14, 15, 26

Yiddish, 404, 413, 418
Yo-he-ho theory, 51

Zipf, G. K., 187, 233, 234, 420

WORD INDEX

a, 445
abbot, 153
abdomen, 163
ablution, 244
abominable, 288
Abraham, 124
Abram, 124
absent, 395
abstract, 29
absurdity, 177
accept, 11
ace, 90
ache, 393
acme, 393
acoustics, 170
acre, 393
acrophony, 432, 433
acute, 393
Adam, 123
adder, 206
admission, 380
admittance, 380, 381
advice, 395
afflatus, 69
agent, 393
agglutinative, 391
ah, 46
ain't, 343, 344, 345
aks, 191
alas, 46
alb, 92
aleph, 443, 444
Alexander, 125
alibi, 405
alien, 18, 19
allies, 95, 96
ally, 96
alms, 196, 197, 250
alpha, 445
alphabet, 433
alto, 241
am, 56, 393
ambition, 201
ambivalency, 246
amiable, 394
ampere, 132
analogy, 77, 78
analytic, 391
anemone, 393
angel, 249, 268
animal, 393
animosity, 393
annual report, 95
antepenult, 187
anthropomorphism, 334
anybody, 69
apathetic, 265
ape, 5, 230
apophony, 212
apostasy, 394
apostle, 210
apple, 230
apprehend, 12
April, 129
apron, 206
aquacade, 252, 253
archaic, 254
are, 393
argot, 387
arid, 242
aristocracy, 105
arm, 89
arrive, 88
as if, 85
asparagus, 281
aspirate, 178
assert, 383
assets, 95
asylum, 116
athlete, 170, 210
atone, 5
atonement, 5
attention, 395
attenuate, 231
attest, 276
aubade, 91
audible, 324
August, 129
aunt, 150
aureate, 395
aurora, 24
automobilary, 260
automobile, 404, 406
automobilier, 260
avatar, 394
avoid, 204
awful, 163
awkward, 30
axe, 393
axis, 393
axle, 393

b, 445
ba, 452
baby, 150
babble, 452
back, 176
bad, 245
badness, 3
baksheesh, 290
balance, 353
band, 96
bang, 48
barbarian, 281
barbarism, 17
bass, 245
be, 393
bear, 144
beautiful, 187
bed, 107
bee, 294
beech, 434
Bellerophon, 281
begin, 380, 381, 382
bekos, 148, 149
benign, 393
best, 207
beta, 445
Bethlehem, 138
better, 230
bhátar, 232

Bible, 435
biff, 48
bigamy, 393
biology, 393
biscuit, 3
blame, 113
blasphemy, 113
blazes, 330, 331
blue, 145
board, 271
boat, 248, 249
body, 68, 69, 329
bon, 223
bond, 96
bonus, 223
book, 230, 434
boor, 17, 393
booties, 162
bosom, 150
bourn, 206
boustrophedon, 437
boy, 185
brat, 277
bread, 153
Brewer, 136
bribe, 74
brood, 277
brothel, 271
brother, 229, 232
brunch, 204, 252
Bunker Hill, 281
bus, 198, 201
bushman, 18
but, 327
buttery, 287
buxom, 277
by golly, 146
by heck, 146
by-law, 393

c, 445
cacophemism, 105
Cæsar, 131
caitiff, 207
calculus, 72
calcumenal, 179
Caliban, 143
camel, 72
candy, 290
cannibal, 143
cant, 387
canter, 201
Canterbury gallop, 201
cantor, 103
cantus, 103
capacious, 394
capital, 394
captain, 82
capture, 11
caput, 277
care, 285
carib, 143
Caribbean, 143
carnal, 263
carnival, 93
casino, 271
Catholicism, 133
catologue, 249
cattle, 229, 277
cavalcade, 252
cavalier, 260
cemetery, 109
central, 176
cerise, 206
certainly, 328
chair, 186
champ, 223
change, 273
chant, 103
chanter, 223
chanteuse, 103
chapter, 394
charade, 430
charity, 285
charm, 102
chattels, 277
chef, 223
cherry, 206
chevalier, 260
chichiri, 193
chief, 82, 277
child, 393
child's, 392
chit, 393
Christ, 145
Christian Scientist, 117, 119
Cicero, 131
circumlocution, 106
civilization, 17
claim, 383
clark, 136
classic, 256, 257, 258
classicism, 258
classicist, 257
classy, 259
clearly, 328
client, 286
climb, 460
close, 176
club, 248, 249
cock, 47
code, 435
cognate, 393
coitus, 313
colored, 117
colorful, 383, 384
combustion, 395
comedy, 65
command, 11
commence, 380, 381, 382
commend, 11
common, 2
commonalty, 2
commune, 2
communication, 2
communion, 5
community, 2, 394
companion, 96
company, 95, 96
compassion, 263
comprehend, 11
conceive, 11
conciliation, 74
condition, 383
connotation, 63
conservative, 300
conversation, 108
coo, 47
correct, 31
cough, 324
courteous, 18
crazy, 4, 210
crocodile, 206
Crœsus, 135, 137
crow, 47
cunning, 162, 393
cup, 211
cupboard, 207
cut, 249
cute, 162

d, 445
dad, 158
dada, 158
daily, 332
damage, 273

dame, 272, 273
damn, 146
Dan Cupid, 272
danger, 206, 272
dangerously, 329
darkness, 249
Darwinism, 133
daughter, 229, 230
debutante, 201
decay, 197, 396
deceive, 288
deception, 11
decheothi, 77
declared, 106
defect, 96
deficiency, 96
deficit, 96
degeneration, 396
deity, 263
delta 445
demi-monde, 201
democracy, 195
Demosthenes, 125
denotation, 63
derive, 397
descend, 460
describe, 422
despise, 249
destroy, 249
determine, 361
detest, 276
Devil, 146, 268
dexterity, 30
diaper, 162
dicere, 12
Dickens, the, 132
dictates, 99
diction, 384
dictionary, 384
different, 332
difficult, 3
digits, 33
diploma, 166
dis-, 3
disaster, 93
disposition, 201
dissipate, 4
dissipation, 4
divide, 249
divine, 163
divinity, 163
division, 3
dog, 151
Dolores, 145
domestic, 83
donate, 383, 384
donation, 383
Don Juan, 131
door, 18
doubt, 3
drink, 327
drinking, 327
dry, 242, 245
dungeon, 272
duplicity, 4, 166
dydee, 162
dynamic, 360, 361
dynamo, 361
dynast, 361
dynasty, 361

eager, 393
east, 395
Easter, 395
economic royalist, 106
economics, 83
economist, 83
economy, 83
echoism, 44
ego, 135
eight, 230
either, 379
eleemosynary, 196
elm, 210, 211
else, 19
emotion, 8
enchantment, 102
endless, 361, 362
enemy, 394
England, 203
English, 399
energy, 360
enter, 460
enthuse, 383, 384
enthusiasm, 383
epénthesis, 211
epicure, 131
equally, 249
equestrian, 259
equine, 393
Eris, 247
Eros, 247
espousals, 336
espouse, 370
essence, 393
establish, 210
etymology, 43
eugenics, 186
Eumenides, 144
euphemism, 104
euphróne, 144
Euxine, 144
evade, 204
Eve, 124
every, 210
everybody, 69
exit, 393
expire, 69
express, 8
expression, 35
expressive, 8
extension, 395
exterminate, 361
extinguere, 89
extraneous, 19

fable, 99, 276
fabrication, 105
fail, 288
fairy, 223
false, 288
falsehood, 105
fame, 99
fan, 276, 277
fanatic, 277
fantasy, 178, 276, 277
farina, 223
farmer, 17
fate, 98, 99
father, 150, 151, 152, 153, 232
fatherhood, 152
fault, 288
fawn, 393
feather, 230, 435
February, 129
fee, 277
feed, 394
feel, 12
feet, 212
female, 152
filly, 394
films, 211
fire, 224
fireless, 72
firmness, 4
five, 34

flare, 69
flexion, 391
flour, 223
foot, 82
footman, 259
Fords, 133
forsythia, 132
foster, 394
freesia, 132
fricative, 178
Friday, 127, 129
fright, 163
frightfully, 163
front, 176
fudgicle, 252
funeral, 336
fur, 394
fuschia, 132
future, 393

gall, 230
gamma, 445
gawky, 30
geese, 212
gee whiz, 146
get, 376, 377
giant, 393
giraffe, 72
girl, 269, 270
glamour, 99, 100
glory, 286
Gloucester, 203
go, 249
Goddans, 48
God's, 122
going, 323
good, 145
good-bye, 201
goodies, 162
good-spell, 102
goody-goody, 162
gnostic, 393
gramary, 100
grammar, 99, 100, 324
grandfather, 153
grandmother, 150
graphic, 100
graphite, 100
graphomania, 100
Great Scott, 132
gringos, 48
grove, 241
guilt, 273
gynealotry, 270
gynecohite, 270
gynecology, 270
gynocracy, 270

hag, 18
hand, 33, 34
handiwork, 11
handkerchiefs, 162
handsome, 11
handy, 11
hankies, 162
haplology, 203, 204
haughty, 260
head, 82, 394
headman, 82
health, 3, 4
heart, 225
heartbroken, 3
heartwhole, 3
heathen, 17
Hebrew, 117, 118
Hector, 136
hedge, 18
Heiland, 4
hell, 330, 331
henna, 160
hennery, 160
Henry, 160, 211
Hexe, 18
hibernate, 332
hi-de-ho, 291
highbrow, 367
hippopotamus, 71
history, 395
hole, 245
holiness, 3, 4
Holy Moses, 132
home, 224
homeopathy, 81
homoiousia, 81
homoousia, 81
honesty, 203
honor, 249
horse, 252
horseless, 72
host, 210, 244
house, 250, 270, 271
housewife, 150
humbly, 203, 392
hundred, 230
hurry, 247
hush, 48
hymnody, 65
hypnotize, 133
hypocrite, 128
hypocritical, 128

I, 342
idea, 51, 52, 73, 395
ideagram, 75
ideology, 262
idol, 51, 263, 395
idolater, 263
idolatry, 203
idolize, 133
ignoramus, 393
immortal, 207
impassion, 265
impassive, 265, 266
impression, 35
incantation, 102
inception, 11
indicates, 12
indigenous, 161
ineffectual, 63
infant, 150
infantryman, 259
Inferno, 365
infirmary, 4
infirmity, 4
inflation, 69
inflexion, 391
insane, 116
insanity, 115, 116
inspire, 69
integer, 4
integrity, 4
intelligence, 28
intention, 395
interminable, 361, 362
intermittently, 330
interpretive, 203
intonation, 65
iota, 81
is, 393
issue, 393
itinerary, 393
It's I, 340, 341
It's me, 340, 341
Itsy-bitsy, 162

January, 128
jargon, 387
jazz, 290, 291
je, 342
Jerusalem, 281
Jew, 117, 118, 119
jiminy, 160
Jimmy, 160
jimson-weeds, 160
join, 249
journal, 332
juba, 291
jubilee, 291
Judah, 124
Judaism, 133
July, 129
jump, 249
Jumping Jehosophat, 132
June, 129

ken, 244, 245, 393
kerchew, 48
kin, 42, 393
kind, 42
kindred, 42
kith, 393
Kleomenes, 125
klu, 286, 287
knee, 230
knight, 259
kru, 286, 287
kymograph, 175

labio-dental, 12, 178-9
la-la, 50
lallation, 50, 55, 152
language, 11, 12
lascivious, 112
last, 207
lateral, 179
lax, 4
league, 95, 96
lecherous, 112
lecture, 427, 428
left, 30, 105
leg, 107
legal obligation, 273
leopard, 72
let, 248
letter, 428
Levi, 124
lewd, 112, 113
lexicography, 275
liabilities, 95, 96
liable, 95
liar, 105
libel, 435
liberal, 299, 300
libidinous, 112
library, 434
libretto, 435
lie, 105
ligament, 95, 96
ligature, 95, 96
limb, 107
lingerie, 162, 163
lingo, 387
liniment, 428
lion, 71
liquidate, 105
listen, 286
literary, 203
loose, 4
Lord, 268
Lothario, 131
loud, 286
love, 55, 56, 333
love-apple, 282
loving-kindness, 361
lowbrow, 367
lubricous, 112
lues, 114
lullaby, 50, 55
lumber, 286
lunacy, 115, 116
lunatic, 115, 116
lustful, 112

ma, 150, 151, 158
macabre, 374
madeira, 152
magic, 99
maintain, 383
make, 249
malady, 207
male, 152
mama, 56, 150, 158
mammals, 150
mammary, 150
mamzer, 290, 413
man, 42, 212
manage, 11
mandate, 11
maneuver, 11
manipulate, 11
mankind, 42
man's, 392
manufacture, 11
marble, 209
March, 129
marriage, 384
marry, 370
martinet, 131
martyr, 394
Marxism, 133
master, 272
mater, 151
maternity, 152
matinee, 91
matrix, 152
matter, 187
May, 129
me, 339
meal, 223
media, 231
Meerschaum, 282
megacles, 125
megalomania, 285
melody, 65
mendacious, 106
mentation, 106
metaphor, 71, 77
metathesis, 206
Methodism, 261
meticulous, 369
metonym, 77
mickle, 284, 285
midnight matinee, 91
mind, 329
minister, 438
mint, 95
misogyny, 270
mister, 202
mistress, 272
misunderstanding, 309
Mittwoch, 127
mob, 198, 201
moist, 245
moisture, 56
Monday, 127
money, 94, 95
monk, 262
moo, 48
moral, 383
morale, 383

morbid, 265
morning, 332
morphology, 66
mother, 150, 151, 152, 232
motherhood, 152
mother-tongue, 152
motion, 8
motorcade, 252
much, 284
muckle, 284
munificence, 394
mural, 394
mutter, 433
mutton, 432
my, 176
mystery, 394
mystic, 394

name, 133, 141
napery, 206
napkin, 206
nation, 121, 140
native, 121, 161
nature, 121
negligence, 273
Negro, 117, 118, 119
neither, 379
neuropath, 265
news, 281
nice, 162
nickname, 205
nigger, 119
nightgown, 162
nightie, 162
Nikephoros, 125
nimble, 211
no, 320
noble, 393
nobody, 69
none, 368
noon, 376
note, 449
nothing, 345
Notre Dame, 273
noun, 133
nun, 151, 262
nurse, 150, 203

obligation, 96
oblige, 95
oblivion, 90
obliviscor, 90
obscene, 113
obsequies, 336
obsolete, 254
occlusive, 177
odds, 4
ode, 65
-ody, 65
offering mat, 74
often, 288
oil, 267
omen, 104
omit, 207
omnibus, 198
onamancy, 141
onion, 277
open, 176
orange, 206
orchitis, 276
orchotomy, 276
oriental, 91
orthodox, 395
orthodoxy, 31
outlandish, 18
ox, 443
oxygen, 186
oxytone, 186

pa, 150, 151, 153, 158
Packard, 133
pagan, 17
palace, 394
palato-alveolar, 179
pansies, 353
panties, 162
pantry, 287
pap, 153
papa, 150, 158
paper, 438
paradise, 268
paraphrase, 106
parent, 371
Parkers, 133
paroxytone, 186
pasigraphy, 445
passion, 263, 264, 265
passive, 265, 266
paste, 153
pasteboard, 153
pater, 151, 224
paternity, 152
pathetic, 265
pathological, 265
pathology, 265
pathos, 265
patriot, 152
pay, 248
pea, 206
peace, 248
peasant, 17
pecuniary, 277
pedagogue, 394
pedals, 82
pedestal, 82
pedestrian, 82, 259
pedicure, 82
pee-pee, 56
pen, 435
pensive, 353
penultima, 186
perceive, 11
peril, 206
perish, 393
person, 394
perspire, 69
Peru, 292
Peter, 124
pfui, 198
phantasy, 178
philosophy, 405, 406
phoneme, 223
phonetics, 66, 169
phonograph, 170
phonography, 170
phonology, 169
physic, 393
physics, 140
piano, 405
pianoforte, 251
pictogram, 75
pidgin, 387
pigeon, 151
pilgrim, 209
pinch-penny, 78
pinhead, 82
plow, 174
pneumatic, 69
pneumonia, 69
pneumotology, 69
poet, 335
point, 448, 449
pollute, 114
Polycrates, 125
polysynthetic, 391

Pope, 153
porter, 95
porterhouse, 286
position, 206
posthumous, 288
postumus, 288
pound, 230, 437
precentor, 103
prehensile, 11
present, 393
probably, 203
problem, 204
prodigal, 263
profanity, 113
progress, 96, 250
proletarian, 311
propaganda, 303, 304, 305
proparoxytone, 186, 187
prosidy, 65
protective custody, 105
protest, 276
prude, 279
psalmody, 65
psychopath, 265
puberty, 394
puerile, 394
pullet, 394
punctuation, 448
puncture, 448
puny, 277
puppet, 394

quadruplets, 186
queen, 269, 270, 393
quick, 393
quiet, 245
quill, 435
quintuplets, 185

race, 397
radical, 299, 300
read, 423
rebel, 201
rebus, 430
receive, 11
reception, 11
recognition, 201
reds, 106
reed, 435
reflex, 8
reject, 8
reliable, 383
religion, 375
remembrance, 394
report, 95
reporter, 95
republic, 430
reputation, 200, 201
respiration, 69
restive, 265, 266
restless, 265, 266
Reuben, 124
revelation, 263
rhetoric, 77
riddle, 206, 423
rider, 260
right, 31, 105
rigid, 4
ring, 95
rival, 278
Roman, 254
romance, 255
Romanesque, 254
romantic, 254, 255, 257, 258
romanticist, 257
Rome, 254
root, 392
rose, 185
Rose Mary, 281
Rothschild, 136, 137
rustic, 17

Sabbath, 128
sack, 267, 287
sacred, 240, 241
sad, 277
sandhi, 208, 212
sanitarium, 115
sanitation, 115
sanity, 115
Sarah, 124
Sarai, 124
satisfaction, 95
Saturday, 127
savage, 6, 17
savagery, 17
Savior, 263
scabrous, 374
scarcely, 210
schizophrenia, 4
schizophrenoid, 4
school, 210
scientist, 117, 119
sedate, 277
sedition, 393
see, 85
semantics, 66
semasiology, 67
serenade, 91
sermon, 101
shall, 368, 464
shem, 244
shibboleth, 193
ship, 294
shoppe, 105
shotover, 281
shriek, 245
siamese, 238, 239
siesta, 376
significant, 54
signification, 67
significs, 67
Simeon, 124
simile, 77, 78
Simon, 125
simply, 203, 392
sinister, 30
sink, 204
sip, 57, 62
siren, 79
sirloin, 285
sky, 242
slave, 18, 286
sleep, 151, 299
slowly, 331
smutty, 113
sneeze, 48
soiree, 91
solemn, 207
solfeggio, 431
solitude, 262
sombrero, 209
some, 78
somebody, 69
sonant, 177
sonata, 394
song, 65
sonnet, 394
sonorous, 394
sophist, 366
soon, 332
sooth, 43, 393
soothsayer, 43
sophisticate, 365

sophisticated, 365-6
sorrow, 287
sorry, 287
soul, 141
soup, 62, 224
space, 382
spaghetti, 290
speak, 9
spell, 101, 102
spell-binders, 102
sphygmos, 175
spirit, 69
splash, 48
stage, 394
star, 90, 91
stark naked, 414
static, 394
stenographic, 170
stenography, 170
stenotype, 170
stipend, 203
stops, 177
strange, 210
stranger, 18
strength, 199
stretching, 395
stupid, 249
suck, 62
summa cum laude, 353
summer, 78, 332
sup, 57, 62
supercilious, 367
superior, 260
suppositions, 203
surd, 177
surplus, 96
swap, 55
sweetheart, 217
sweetly, 328
swish, 48
syncope, 210
synecdoche, 77
syntax, 324
synthetic, 321
syphilis, 113

tablet, 435
take, 249
talisman, 394
talk, 108
tan, 395, 396
tar, 201
tarpaulin, 201
taste, 10
teensy-weensy, 162
teeny-weeny, 162
telegraph, 405
telephone, 170
temporary, 203
ten, 229, 230, 395
tenderloin, 286
tense, 395
tensing, 395
tension, 395
tenues, 231
term, 361, 394
terminus, 361
terrace, 395
terribly, 163
terrier, 395
terror, 163
testament, 276
testator, 276
testicle, 276
testify, 276
tetragrammation, 145
that, 230
the, 331
theater, 113
Theodore, 190
therapeutics, 396
thesaurus, 191
think, 190
thirst, 395
thirteen, 207
thore, 229
threnody, 65
thrill, 207
through, 394
Thucydides, 125
Thursday, 127
tiger, 72
toast, 395
tobacco, 201
tomato, 379
to-morrow, 244
tongue, 12
too too divine, 163
toreador, 290
torrid, 395
tragedy, 65
tram, 285
translation, 71
transports, 8
tree, 34
tremolo, 64
tribulation, 263
triplets, 186
trope, 77
trouble, 204
trowel, 394
trust, 273
trustworthiness, 361
truth, 190
tub, 249
Tuesday, 127, 129
tunescape, 254
tunic, 267
turnip, 294
turns, 77
turpentine, 200
turtle, 209
twist, 3
two, 3, 33
tyrant, 375

ultima, 186
ultimatum, 186
umlaut, 212
union, 277
unity, 2, 3, 5
university, 201
unspeakable, 63
untruth, 105
unutterable, 63
unvoiced, 177
uppish, 260
urbane, 17
Usted, 201
Utopia, 450
utterly, 163

varsity, 201
vaseline, 133
velar, 179
vellum, 435
velum, 179
vernacular, 161
verse, 437
vespers, 92
vice, 280
victrola, 133
villain, 17
virtue, 279
vision, 395
vivid, 393

voice, 167
voiced, 177
volt, 132
vowel, 21, 167

wall, 249
war, 242
warmth, 211
wasp, 210-11
water, 230
Waterman, 133
watt, 132
wealth, 18
wed, 370
wedding, 336
Wednesday, 127
weigh, 353
wench, 270
whist, 48
whizz, 38
who, 347
whole, 285
wholeness, 3
whom, 347
will, 368, 464
wine, 267
winnow, 277
winter, 332
wireless, 72
wise, 395
wised-up, 365
wit, 52
witch, 18, 395
with, 368
witness, 276
woman, 123
wood, 153
Worcester, 203
word, 43, 77
wretch, 279
write, 428

yam, 56
year, 78
yes, 320, 321
yesterday, 244
yid, 119
yiddish, 118
you, 201
yum yum, 56, 57

zounds, 145
zwei, 3
zweifel, 3

Date Due

Date Due

Due	Returned	Due	Returned
[illegible]	MAY 09 1997		
MAY 09 1997	APR 25 1996		
MAY 12 1997	MAY 09 1997		

401
G618w
c.2

The wonder of words; main
401G618w C.2

3 1262 03156 2522

KEEP CARD IN POCKET

Date Due

DUE	RETURNED	DUE	RETURNED